

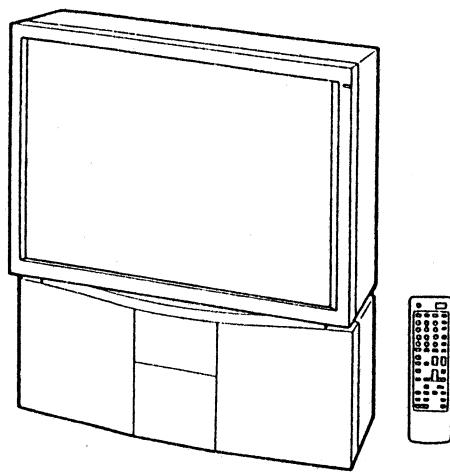
KP-S4613

RM-832

SERVICE MANUAL

AEP Model

Chassis No. SCC-F39A-A



AP-2 CHASSIS

MODELS OF THE SAME SERIES

KP-S4613

SPECIFICATIONS

Television system	B/G/H, D/K, L, I		
Colour system	PAL/SECAM and NTSC 3.58/NTSC 4.43 (VIDEO IN)		
Channel coverage	See page 2 "Receivable channels and channel displays" at the bottom.		
Projected picture size	116 cm (46 inches)		
Terminals			
Rear	- \ominus 1 21-pin Euro connector (CENELEC standard) inputs for audio and video signals - inputs for RGB - outputs of TV video and audio signals \ominus +2/- \ominus 2 21-pin Euro connector - inputs for audio and video signals - inputs for S-video - outputs for audio and video signals (selectable) \ominus +4/- \ominus 4 21-pin Euro connector - inputs for audio and video signals - inputs for S-video - outputs for audio and video signals (monitor out)	Front	- \ominus 2, - \ominus 4 S-video inputs - 4 pin DIN - \ominus Audio inputs (L, R) - phono jacks \ominus S-video output 4-pin DIN - \ominus Audio outputs - phono jacks - \ominus Audio outputs (variable)-phono jacks External speaker terminals: 2-pin DIN
		Sound output	- \ominus 3 video input - phono jack
		Power consumption	- \ominus Audio inputs - phono jacks
		Dimensions (W x H x D)	- \ominus 3 S-video input - 4-pin DIN
		(incl. Speakers)	- Headphone jack: stereo minijack
		Mass (incl. speakers)	2 x 30W
		Other features	220 Wh
			Dimensions (W x H x D) 1103.9 x 1289.1 x 511.8 mm
			(incl. Speakers)
			Mass (incl. speakers) 83 kg
			Other features Digital comb filter (High resolution)
			PIP (Picture-in-picture)

Design and specifications are subject to change without notice.

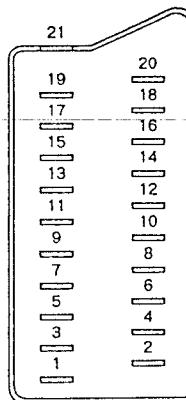
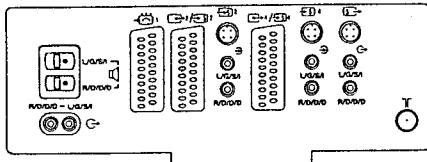
COLOR REAR VIDEO PROJECTOR
SONY®



Receivable Channels and Channel Displays

Receivable channels	Indication on the screen
PAL B/G/H	E2..12 21..69
CABLE TV (1)	S1..41
CABLE TV (2)	S01..S05 M1..M10 U1..U10
ITALIA	A B C D E F G H H1 H2 21..69
SECAM D/K	R01..R12 R21..R60
SECAM L	F2..F10 F21..F69
PAL I	B21..B68
	C02..C03 C04..C12 C21..C69
	S01..S02..S41
	S42..S46 S01..S10 S11..S20
	C11..C69
	C02..C12 C21..C60
	C01..C12 C21..C69
	C21..C68

21 pin connector (-5, -2, -4)



4 pin connector (-5)

Pin No.	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB, 75ohms, positive Sync: 0.3V ; 1dB
4	C (S signal) Input	0.3V ± 3dB, 75ohms, positive

Pin No.	1	2	Signal	Signal level
1	○	○	Audio output B (right)	Standard level: 0.5Vrms Output Impedance: Less than 1kohm*
2	○	○	Audio Input B (right)	Standard level: 0.5Vrms Input Impedance: More than 10kohms*
3	○	○	Audio output A (left)	Standard level: 0.5Vrms Output Impedance: Less than 1kohm*
4	○	○	Ground (audio)	
5	○	○	Ground (blue)	
6	○	○	Audio Input A (left)	Standard level: 0.5Vrms Input Impedance: More than 10kohms*
7	○	●	Blue Input	0.7V ± 3dB, 75ohms, positive
8	○	○	Fu clon select (AV control)	High state (9.5 ~ 12V): Part mode Low state (0 ~ 2V): TV mode Input Impedance: More than 10kohms. Input capacitance: Less than 2 nF
9	○	○	Ground (green)	
10	○	○	Open	
11	○	●	Green	Green signal: 0.7V ± 3dB, 75ohms, positive
12	○	○	Open	
13	○	○	Ground (red)	
14	○	○	Ground (blanking)	
15	○	-	Red Input	0.7V ± 3dB, 75ohms, positive
	-	○	(S signal) chroma Input	0.3V ± 3dB, 75ohms, positive
16	○	●	Blanking Input (Ys signal)	High state (1 ~ 3V) Low state (0 ~ 0.4V) Input Impedance: 75ohms
17	○	○	Ground (video output)	
18	○	○	Ground (video input)	
19	○	○	Video output	1V ± 3dB, 75ohms, positive Sync: 0.3V (-3, +10dB)
20	○	-	Video Input	1V ± 3dB, 75ohms, positive Sync: 0.3V (-3, +10dB)
	-	○	Video Input (S signal)	1V ± 3dB, 75ohms, positive Sync: 0.3V (-3, +10dB)
21	○	○	Common ground (plug, shield)	

○ connected ● unconnected (open)

* at 20Hz ~ 20kHz

TABLE OF CONTENTS

Section	Title	Page	Section	Title	Page
1. GENERAL			4. CIRCUIT ADJUSTMENT		
1-1. Overview	4		4-1. Electrical Adjustments	31	
1-2. Adjusting Colour Registration (Convergence)	5		4-2. G Board Adjustments	35	
1-3. Tuning in to TV Stations	5		4-3. M Board Adjustment	35	
1-4. Additional Presetting Functions	6		4-4. V Board Adjustment	35	
1-5. Watching the TV	8		4-5. IF Adjustment	35	
1-6. Adjusting and Setting the TV Using the Menu	9		4-6. N Board Adjustments	36	
1-7. PIP (Picture in Picture)	10		4-7. DS Board Adjustments	36	
1-8. Teletext	10		4-8. Test Mode 2:	37	
1-9. Operations	12		4-9. Error Message	38	
1-10. For Your Information	13		4-10. Error II C Bus Diagnosis System	38	
2. DISASSEMBLY			5. DIAGRAMS		
2-1. H2 Board Removal	15		5-1. Block Diagrams	39	
2-2. D Board Removal	15		5-2. Circuit Boards Location	51	
2-3. H1 and H3 Boards Removal	16		5-3. Schematic Diagrams and Printed Wiring Boards		
2-4. Back Cover Removal	16		(1) Schematic Diagrams of H1, H2, H3 and F Boards	52	
2-5. F Bracket Removal	17		(2) Schematic Diagram of J Board	56	
2-6. Main Chassis Assy Removal	17		(3) Schematic Diagram of M Board	61	
2-7. Service Position	18		(4) Schematic Diagram of A Board	68	
2-8. J Bracket and J Board Removal	18		(5) Schematic Diagram of D Board	75	
2-9. B1 Board Removal	19		(6) Schematic Diagrams of ZR, ZG and ZB Boards	79	
2-10. M, VM and A1 Boards Removal	19		(7) Schematic Diagrams of B1 and V Boards	80	
2-11. Extension Board	20		(8) Schematic Diagram of N Board	85	
2-12. N Bracket Removal	20		(9) Schematic Diagrams of VM, DS and G Boards	91	
2-13. G Board Removal	21		(10) Schematic Diagrams of CR, CG, CB and P Boards	95	
2-14. High-Voltage Cable Installation and Removal	21		(11) Schematic Diagram of AI Board	99	
2-15. Chassis Assy Removal	22		5-4. Semiconductors	102	
2-16. Picture tube Removal	22				
3. SET-UP ADJUSTMENT			6. EXPLODED VIEWS		
3-1. Focus Lens Adjustments	23		6-1. Control Panel	104	
3-2. Deflection Yoke Position Adjustments	23		6-2. Cabinet	105	
3-3. 2-Pole Magnet Adjustment	24		6-3. Chassis	106	
3-4. 4-Pole Magnet Adjustment	24		6-4. Picture Tube	107	
3-5. De-Focus Adjustment (Blue)	24				
3-6. Green Picture Adjustment	24				
3-7. Green and Red Registration Adjustments	27				
3-8. Green and Blue Registration Adjustments	28				
3-9. Registration Adjustments	29				
3-10. White Balance Adjustments	29				
7. ELECTRICAL PARTS LIST		108			

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

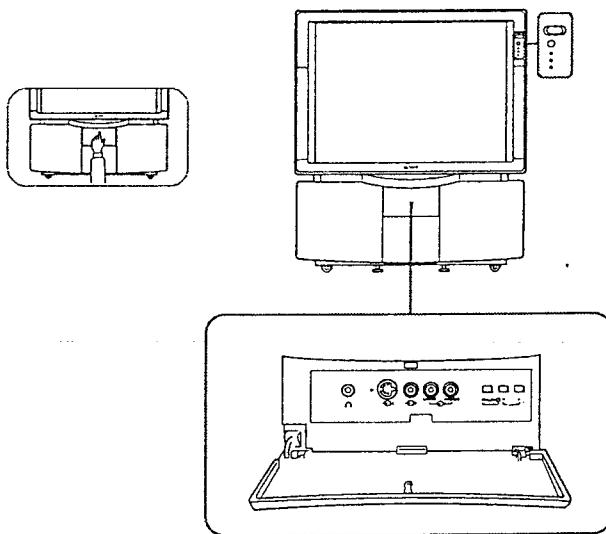
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

SECTION 1 GENERAL

1-1. OVERVIEW

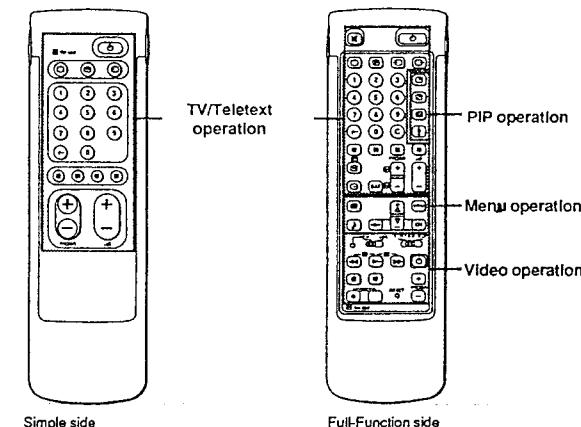
This section briefly describes the buttons and controls on the TV set and on the Remote Commander. For more information, refer to the pages given next to each description.

TV set-front



Symbol	Name	Refer to page
①	Main power switch	14
②	Standby indicator	14
A-C-B	Stereo A/B indicators	16
③	Headphones jack	22
-④ 3, -⑤ 3, -⑥ 3,	Input jacks (S video/video/audio)	22
P-⑦ 3	Function selector (Programme/volume/input)	15
-⑧	Adjustment buttons for function selector	15

Remote commander



Note
The SAT button does not operate with this TV.

TV/Teletext operation

Symbol	Name	Refer to page
⑨	Mute on/off button	15
⑩	Standby button	14
⑪	TV power on/TV mode selector button	14
⑫	Teletext button	15
⑬	Input mode selector	15
⑭	Output mode selector	23
1,2,3,4,5,6, 7,8,9, and 0	Number buttons	14
-/-	Double-digit entering button	14
C	Direct channel entering button	11
Δ+/-	Volume control button	14
PROGR +/-	Programme selectors	14
⑮ ⑯	Teletext page access buttons	19
■	Picture adjustment button	16
♪	Sound adjustment button	16
⑰	On-screen display button	15
⑱	Teletext hold button	19
⑲	Time display button	15
■■■■	Fastext buttons	19

PIP (Picture-in-picture) operation

Symbol	Name	Refer to page
⑳	PIP on/off button	18
⑳	PIP source selector	18
⑳	Swap button	18
⑳	PIP position changing button	18

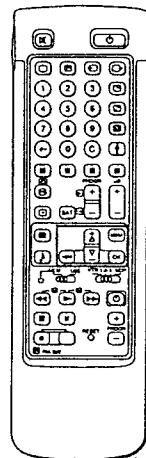
Menu operation

Symbol	Name	Refer to page
MENU	Menu on/off button	8
△+▽-	Select buttons	8
OK	OK(confirming)button	8
←	Back button	8

Video operation

Symbol	Name	Refer to page
MEM USE	MEM/USE selector	25
MEM	MEM indicator	25
VTR1/2/3,	Video equipment selector	24
MDP		
◀◀▶▶■	Video equipment operation buttons	24
II ● ○		
PROGR +/-		
RESET	RESET button	25

1-2. ADJUSTING COLOUR REGISTRATION (CONVERGENCE)



Once you have set up the TV, you can choose the language of the menu. Then you should converge the three colour layers (red, green, and blue).

Before you begin

- Check that the Full-Function side of the Remote Commander is visible.
- Locate Menu operation buttons on the Remote commander. They are shaded in the illustration at the left.

1 Display the Menu

- Depress \odot on the TV.
The TV will switch on. If the standby indicator on the TV is lit, press \odot or a number button on the Remote Commander.
- Press MENU.
The main menu appears. (See Fig. 1)

MENU



Fig. 1

2 Choose a language

- Select "Language" with the Δ or ∇ -button and press the OK button.
The LANGUAGE menu appears (See Fig. 2)
- Select the language you want with Δ + or ∇ - and press OK.
- Press \leftarrow to return to the main menu.



Fig. 2

3 Converge the red, green, and blue lines

- Select "Convergence" with Δ + or ∇ - and press OK.
The convergence menu appears. (See Fig. 3)
- Select "the line" you want to adjust with Δ + or ∇ -.
Key to line adjustment symbols:
I (red vertical - left/right adjustment)
- (red horizontal - up/down adjustment)
I (blue vertical - left/right adjustment)
- (blue horizontal - up/down adjustment)
- Press OK.
The line to adjust is selected.
- Press Δ + or ∇ - to converge the selected line with the centre green line and press OK.
- Repeat steps 2-4 to adjust the other lines, until all the lines have overlapped to form a white cross. (See Fig. 4.)
- Press MENU to return to TV picture.

To move up (horizontal line)	Press Δ +
To move right (vertical line)	Press ∇ -
To move down (horizontal line)	Press ∇ +
To move left (vertical line)	Press Δ -

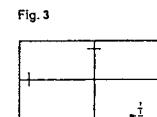
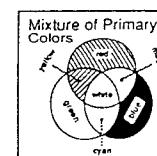
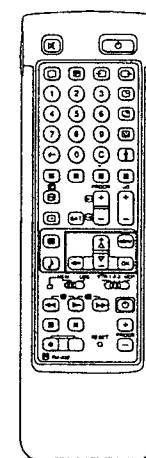


Fig. 3



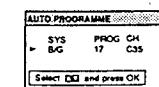
Mixture of Primary Colors

1-3. TUNING IN TO TV STATIONS

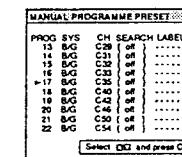


You can preset the channels (up to 100 channels) by choosing either the automatic or manual method.

The automatic method is easier if you want to preset all receivable channels at once. Use the manual method if you only have a few channels and want to preset channels one by one. The manual method is also convenient for allocating programme numbers to various video input sources.



Select OK and press OK



Select OK and press OK

Preset channels automatically

- Press MENU to display the main menu.
- Select "Preset" with Δ + or ∇ - and press OK.
The PRESET menu appears. (See Fig. 5.)
- Select "Auto Programme" with Δ + or ∇ - and press OK.
The AUTO PROGRAMME menu appears. (See Fig. 6.)
- Press OK. Select if necessary the TV broadcast system with Δ + or ∇ - and press OK. (BG for western European countries, DK for eastern European countries) The first element of the "PROG" number will be displayed in red on a black background.
- Select the programme (number button) from which you want to start presetting. Select the first element of the double-digit number with Δ + or ∇ - or the number buttons (e.g. For "17", select "1") and press OK.
The second element of "PROG" will be displayed in red on a black background.
- Select the second element of the double-digit number with Δ + or ∇ - or the number buttons (e.g. For "17", select "7") and press OK. (See Fig. 7.)
- Using Δ + or ∇ -, select C (to start presetting from the C channels) or S (to start presetting from the S channels) and press OK.
The automatic channel presetting starts.
When presetting is finished, the preset menu reappears. (See Fig. 8.) All available channels are now stored on successive number buttons.
- If you want to change to another broadcasting system, repeat 3-6.
- Press MENU to return to TV picture.

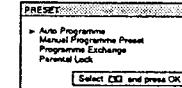


Fig. 5

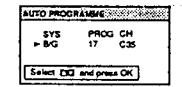


Fig. 6

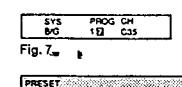


Fig. 7

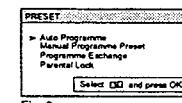


Fig. 8

Note on the DEMO function
If you choose DEMO on the main menu, you can see a sequential demonstration of the menu functions.

Use this method if there are only a few channels in your area to preset or if you want to preset channel's one by one. You may also allocate programme numbers to various video input sources.

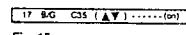
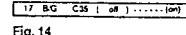
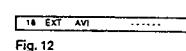
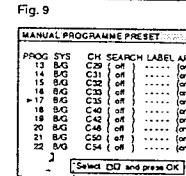
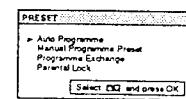
If you have made a mistake
Press \leftarrow to go back to the previous position.

To return to the main menu
Keep pressing \leftarrow .

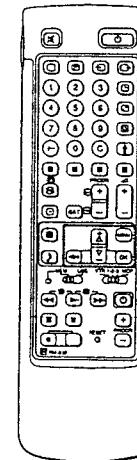
To tune in a channel by frequency
After selecting F in step 6, enter three digits using the number buttons.

Preset channels manually

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with $\Delta+$ or $\nabla-$ and press OK. The PRESET menu appears. (See Fig. 9.)
- 3 Select "Manual Programme Preset" with $\Delta+$ or $\nabla-$ and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 10.)
- 4 Using $\Delta+$ or $\nabla-$, select the programme position (number button) to which you want to preset a channel, and press OK.
- 5 Select, if necessary, the TV broadcast system (B/G for western European countries, D/K for eastern European countries) or a video input source (EXT) with $\Delta+$ or $\nabla-$. Then press OK. The CH position will be displayed in red on a black background. (See Fig. 11.)
- 6 Using $\Delta+$ or $\nabla-$, select C (to preset a regular channel), S (to preset a cable channel), or F (to tune in by frequency) and press OK. The first element of the "CH" number will be displayed in red on a black background.
- If you have selected EXT in step 4, select the video input source with $\Delta+$ or $\nabla-$. (See Fig. 12.)
- There are two ways to preset channels. If you know the channel number, go to step "7-Manual".
 or
 If you don't know the channel number, go to step "8-Search".
- 7 Manual
 - a Select the first element of the "CH" number with $\Delta+$ or $\nabla-$ or the number buttons and press OK. The second element of the "CH" number will be displayed in red on a black background.
 - b Select the second element of the number with $\Delta+$ or $\nabla-$ or the number buttons. The selected number appears. (See Fig. 13.)
 - c Press OK. The "SEARCH" position is highlighted and the selected channel is now stored. (See Fig. 14.)
 - d Press OK until the cursor appears by the next programme position.
 - e Repeat steps 3 to 7 to preset other channels.
- 8 Search
 - a Press OK repeatedly until the colour of the SEARCH position changes.
 - b Start searching for the channel with $\Delta+$ (up) or $\nabla-$ (down). The CH position changes colour. (See Fig. 15.) The CH number starts counting up or downwards. When a channel is found, it stops. (See Fig. 16.)
 - c Press OK if you want to store this channel. If not, press $\Delta+$ or $\nabla-$ to continue channel searching.
 - d Press OK until the cursor appears by the next programme position.
 - e Repeat steps 3 to 7 to preset other channels.
- 9 Press MENU to return to TV picture.



PROGRAMME EXCHANGE



For programme positions beyond 15
The display scrolls automatically.
If you have made a mistake
 Press \leftarrow to go back to the previous position
To go back to main menu
 Keep pressing \leftarrow .

This section shows you additional presetting functions such as exchanging or skipping programme positions, captioning a station name, manual fine-tuning, and using the parental lock.

You can skip this section, if not needed.

Before you begin

- Check that the Full Function side of the Remote Commander is visible.
- Locate the Menu operation buttons.

Exchanging Programme Positions

With this function, you can exchange the programme positions to a preferable order.

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with $\Delta+$ or $\nabla-$ and press OK. The PRESET menu appears.
- 3 Select "Programme Exchange" with $\Delta+$ or $\nabla-$ and press OK. The PROGRAMME EXCHANGE menu appears. (See Fig. 17.)
- 4 Using $\Delta+$ or $\nabla-$, select the programme position you want to exchange with another and press OK. The colour of the selected position changes. (See Fig. 18.)
- 5 Using $\Delta+$ or $\nabla-$, select the programme position to be exchanged and press OK. Now the two programme positions have been exchanged. (See Fig. 19.)
- 6 Repeat steps 4 and 5 to exchange other programme positions.
- 7 Press MENU to return to TV picture.

PROGRAMME EXCHANGE	
PROG CH	LABEL
13 C29	21
14 C31	22
15 C32	23
16 C33	24
17 C35	25
18 C46	26
19 C47	27
20 C48	28

Fig. 17 17 C35 28 S18

Fig. 18

PROGRAMME EXCHANGE	
PROG CH	LABEL
13 C29	21
14 C31	22
15 C32	23
16 C33	24
17 C40	25
18 C46	26
19 C42	27
20 C46	28

Fig. 19

Tuning in to a Channel Temporarily

You can tune in to a channel temporarily, even when it has not been preset. Use the buttons on the Full-Function side of the Remote Commander.

- 1 Press C on the Remote Commander. For cable channels, press C twice. The indication "C" ("S" for cable channels) appears on the screen. (See Fig. 20.)
- 2 Enter the double-digit channel number using the number buttons (e.g. for channel 4, first press 0, then 4). The channel appears. However, the channel will not be stored.

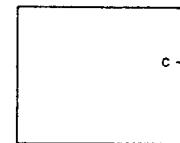


Fig. 20

MANUAL PROGRAMME PRESET

You can skip unused programme positions when selecting programmes with the PROGR +/- buttons. However, the skipped programmes may still be called up when you use the number buttons.

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with $\Delta+$ or $\nabla-$ and press OK. The PRESET menu appears.
- 3 Select "Manual Programme Preset" with $\Delta+$ or $\nabla-$ and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig.21.)
- 4 Using $\Delta+$ or $\nabla-$, select the programme position which you want to skip and press OK. The "SYS" position changes colour.
- 5 Press $\Delta+$ or $\nabla-$ until "----" appears in the SYSTEM position. (See Fig. 22.)
- 6 Press OK. (See Fig.23.) When you select programmes using the PROGR+/-buttons, the programme position will be skipped.
- 7 Repeat steps 4 to 6 to skip other programme positions.
- 8 Press MENU to return to TV picture.

If you have made a mistake
Press \leftarrow to go back to the previous position.
To go back to main menu
Keep pressing \leftarrow .



MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C29 [off] (on)
14	B/G	C30 [off] (on)
15	B/G	C31 [off] (on)
16	B/G	C32 [off] (on)
17	B/G	C40 [off] (on)
18	---	C41 [off] (on)
19	---	C42 [off] (on)
20	B/G	C46 [off] (on)
21	B/G	C50 [off] (on)
22	B/G	C54 [off] (on)

Fig. 21

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C29 [off] (on)
14	B/G	C30 [off] (on)
15	B/G	C31 [off] (on)
16	B/G	C32 [off] (on)
17	B/G	C40 [off] (on)
18	---	C41 [off] (on)
19	---	C42 [off] (on)
20	B/G	C46 [off] (on)
21	B/G	C50 [off] (on)
22	B/G	C54 [off] (on)

Fig. 22

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C29 [off] (on)
14	B/G	C30 [off] (on)
15	B/G	C31 [off] (on)
16	B/G	C32 [off] (on)
17	B/G	C40 [off] (on)
18	---	C41 [off] (on)
19	---	C42 [off] (on)
20	B/G	C46 [off] (on)
21	B/G	C50 [off] (on)
22	B/G	C54 [off] (on)

Fig. 23

MANUAL PROGRAMME PRESET

You can "name" a channel or an input video source using up to five characters (letters or numbers) to be displayed on the TV screen (e.g. BBC1). Using this function, you can easily identify which channel or video source you are watching.

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with $\Delta+$ or $\nabla-$ and press OK. The PRESET menu appears.
- 3 Select "Manual Programme Preset" with $\Delta+$ or $\nabla-$ and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 24.)
- 4 Using $\Delta+$ or $\nabla-$, select the programme position you want to caption and press OK repeatedly until the first element of the LABEL position is highlighted.
- 5 Select a letter or number with $\Delta+$ or $\nabla-$ and press OK. The next element will be highlighted. Select other characters in the same way. If you want to leave an element blank, select $-$ and press OK. (See Fig. 25.)
- 6 After selecting all the characters, press OK repeatedly until the cursor appears by the next programme position (at the left margin). Now the caption you chose is stored. (See Fig. 26.)
- 7 Repeat steps 5 and 6 to caption names for other channels.
- 8 Press MENU to return to TV picture.

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C29 [off] (on)
14	B/G	C30 [off] (on)
15	B/G	C31 [off] (on)
16	B/G	C32 [off] (on)
17	B/G	C40 [off] (on)
18	---	C41 [off] (on)
19	---	C42 [off] (on)
20	B/G	C46 [off] (on)
21	B/G	C50 [off] (on)
22	B/G	C54 [off] (on)

Fig. 24

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C29 [off] (on)
14	B/G	C30 [off] (on)
15	B/G	C31 [off] (on)
16	B/G	C32 [off] (on)
17	B/G	C40 [off] (on)
18	---	C41 [off] (on)
19	---	C42 [off] (on)
20	B/G	C46 [off] (on)
21	B/G	C50 [off] (on)
22	B/G	C54 [off] (on)

Fig. 25

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C29 [off] (on)
14	B/G	C30 [off] (on)
15	B/G	C31 [off] (on)
16	B/G	C32 [off] (on)
17	B/G	C40 [off] (on)
18	---	C41 [off] (on)
19	---	C42 [off] (on)
20	B/G	C46 [off] (on)
21	B/G	C50 [off] (on)
22	B/G	C54 [off] (on)

Fig. 26

MANUAL PROGRAMME PRESET

Manual Fine-Tuning

Normally, the AFT (automatic fine-tuning) is already operating. However, if the picture is distorted, you can use the manual fine tuning function to obtain better picture reception.

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with $\Delta+$ or $\nabla-$ and press OK. The PRESET menu appears.
- 3 Select "Manual Program Preset" with $\Delta+$ or $\nabla-$ and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 27.)
- 4 Using $\Delta+$ or $\nabla-$, select the programme position corresponding to the channel which you want to manually fine-tune, and press OK repeatedly until the AFT position changes colour.
- 5 Fine-tune the channel with $\Delta+$ or $\nabla-$ so that you get the best TV reception. As you press the cursor buttons, the frequency changes from -15 to +15. (See Fig. 28.)
- 6 After fine tuning, press OK. The cursor appears beside the next programme position (at the left margin). (See Fig. 29.) Now the fine-tuned level is stored.
- 7 Repeat steps 4 to 6 to fine-tune other channels.
- 8 Press MENU to return to TV picture.

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C29 [off] (on)
14	B/G	C30 [off] (on)
15	B/G	C31 [off] (on)
16	B/G	C32 [off] (on)
17	B/G	C40 [off] (on)
18	---	C41 [off] (on)
19	---	C42 [off] (on)
20	B/G	C46 [off] (on)
21	B/G	C50 [off] (on)
22	B/G	C54 [off] (on)

Fig. 27

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C29 [off] (on)
14	B/G	C30 [off] (on)
15	B/G	C31 [off] (on)
16	B/G	C32 [off] (on)
17	B/G	C40 [off] (on)
18	---	C41 [off] (on)
19	---	C42 [off] (on)
20	B/G	C46 [off] (on)
21	B/G	C50 [off] (on)
22	B/G	C54 [off] (on)

Fig. 28

MANUAL PROGRAMME PRESET		
PROG	SYS	CH SEARCH LABEL AFT
13	B/G	C29 [off] (on)
14	B/G	C30 [off] (on)
15	B/G	C31 [off] (on)
16	B/G	C32 [off] (on)
17	B/G	C40 [off] (on)
18	---	C41 [off] (on)
19	---	C42 [off] (on)
20	B/G	C46 [off] (on)
21	B/G	C50 [off] (on)
22	B/G	C54 [off] (on)

Fig. 29

PARENTAL LOCK

You can prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

- 1 Press MENU to display the main menu.
- 2 Select "Preset" with $\Delta+$ or $\nabla-$ and Press OK. The PRESET menu appears.
- 3 Select "Parental Lock" with $\Delta+$ or $\nabla-$ and press OK. The PARENTAL LOCK menu appears. (See Fig. 30.)
- 4 Using $\Delta+$ or $\nabla-$, select the programme position you want to block and press OK. The selected PROG number, CH and LABEL change colour and the TV picture disappears indicating that this programme is now blocked. (See Fig. 31.)
- 5 Repeat step 4 to block other programme positions.
- 6 Press MENU to return to TV picture.

Cancelling blocking

- 1 On the PARENTAL LOCK menu, select the programme position you want to unblock with $\Delta+$ or $\nabla-$.
- 2 Press OK. The selected PROG number, CH and LABEL change colour to normal colour and the TV picture appears indicating that the blocking has been cancelled.

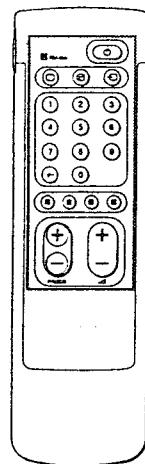
PARENTAL LOCK		
PROG	CH	LABEL
13	C29	..... = 21 C56
14	B/G	C30 [off] (on)
15	C32	..... = 23 C57
16	C33	..... = 24 S43
17	B/G	C40 [off] (on)
18	C35	..... = 26 S46
19	C42	..... = 27 S16
20	B/G	C46 [off] (on)
21	C48	..... = 28 S15
22	B/G	C50 [off] (on)
23	C52	..... = 29 S17
24	C53	..... = 30 S18

Fig. 30

PARENTAL LOCK		
PROG	CH	LABEL
13	C29	..... = 21 C56
14	B/G	C30 [off] (on)
15	C32	..... = 23 C57
16	C33	..... = 24 S43
17	B/G	C40 [off] (on)
18	C35	..... = 26 S46
19	C42	..... = 27 S16
20	B/G	C46 [off] (on)
21	C48	..... = 28 S15
22	B/G	C50 [off] (on)
23	C52	..... = 29 S17
24	C53	..... = 30 S18

Fig. 31

1-5. WATCHING THE TV



This section explains the basic functions you use while watching TV. Most of the operations can be done using the simple side of the Remote Commander.

Switching the TV on and off

Switching on

Depress \odot on the TV.

Switching off temporarily

Press \odot on the Remote Commander. The TV enters standby mode and the standby indicator on the front of the TV lights up.

To switch on again

Press \odot , PROGR +/-, or one of the number buttons on the Remote Commander.

Switching off completely

Depress \odot on the TV.

Selecting TV Programmes

Press PROGR +/- or press the number buttons.

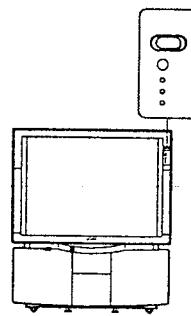
To select a double-digit number

Press $\text{--}/\text{--}$, then the numbers.

For example, if you want to choose 23, press $\text{--}/\text{--}$, 2, and 3.

Adjusting the Volume

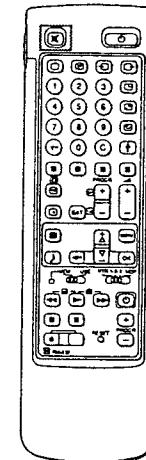
Press $\Delta \text{+/-}$.



If no picture appears when you depress \odot on the TV and if the standby indicator on the TV is lit, the TV is in standby mode.
Press \odot or one of the number buttons to switch it on.

For details of the teletext operation, refer to page 19.

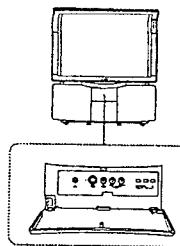
For details of the video input picture, refer to page 23.



Operating the TV Using the Buttons on the TV

With the $\text{--}/\text{+}$ buttons on the TV, you can select programmes, adjust the volume, and select video input sources.

- 1 Press the $\text{P}\text{--}\text{+}$ button repeatedly until the programme number, Δ (for volume), or \ominus (for video input picture) appears. Then adjust with the $\text{--}/\text{+}$ buttons.
- 2 Press the $\text{--}/\text{+}$ buttons to switch on the TV from the standby mode.
- 3 Press $\text{--}/\text{+}$ simultaneously to reset picture and sound controls to the factory preset level (RESET function).



Watching Teletext or Video Input

Watching teletext

- 1 Press \ominus to view the teletext.
- 2 For teletext operation, enter a 3-digit page number with the number buttons to select a page.
For fasttext operation, press one of the coloured buttons.
For both operations, press \ominus (PAGE +) for the next page or \oplus (PAGE -) for the preceding page.

- 3 To go back to the normal TV picture, press \odot .

Watching a video input picture

- 1 Press \ominus repeatedly until the desired video input appears.
- 2 To go back to the normal TV picture, press \odot .

More Convenient Functions

Use the Full-Function side of the Remote Commander.

Displaying the on screen indications

- Press \odot once to display all the indications. They will disappear after a few seconds.
- Press \odot twice to have the programme number and label stay on screen. Press twice again to make the indications disappear.

Muting the sound

Press \times .
To resume normal sound, press \times again.

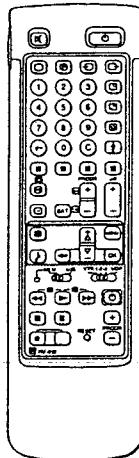
Displaying the time

Press \odot . This function is available only when teletext is broadcast.
To make the time display disappear, press \odot again.

1-6. ADJUSTING AND SETTING THE TV USING THE MENU

PICTURE CONTROL

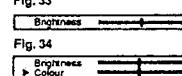
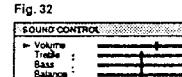
SOUND CONTROL



Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste, in addition, you can change the aspect ratio of the TV display for wide screen effect or set the resolution to obtain a higher quality picture. You can also select dual sound (bilingual) programmes when available or adjust the sound for listening with the headphones.

- 1 Press **■** (for picture) or **△** (for sound) on the remote Commander.
or
Press MENU and select "Picture Control" or "Sound Control", then press OK. The PICTURE CONTROL or SOUND CONTROL menu appears. (See Fig. 32 or Fig. 33.)
- 2 Using **△+** or **▽-**, select the item you want to adjust and press OK. The selected item changes colour. (See Fig. 34.)
- 3 Adjust the setting with **△+** or **▽-** and press OK. The cursor appears beside the next item (at the left margin). (See Fig. 35.)
For the effect of each control, see the table below.
- 4 Repeat steps 2 and 3 to adjust other items.
- 5 Press MENU to return to TV picture.



Effect of each control

PICTURE CONTROL	Effect
Contrast	Less — More
Brightness	Darker — Brighter
Colour	Less — More
Hue	Greenish — Reddish
Sharpness	Softer — Sharper
Reset	Resets picture to the factory preset levels.
Format	(4:3)
Resolution	(high)

If you have made a mistake
Press **←** to go back to the previous position.

To go back to the main menu
Keep pressing **←**.

Note
HUE is only available for NTSC colour systems and RESOLUTION does not work for SECAM colour systems.

Note on LINE OUT
The audio level and the dual sound mode output from the G-jack on the rear correspond to the Headphone VOLUME and DUAL SOUND settings.

When watching a video input picture
You can select DUAL SOUND to change the sound.

SOUND CONTROL	Effect
Volume	Less — More
Treble	Less — More
Bass	Less — More
Balance	More left — More right
Reset	Resets sound to the factory preset levels.
Loudness	off: Normal on: When listening to low volume sound.
Space	off: Normal on: Obtain acoustic sound effect.
Dual Sound	A: left channel B: right channel Stereo mono
Headphones :	The selected mode of the A-CD-B Indicator on the TV lights up.
Volume	Less — More
Dual Sound	A: left channel B: right channel Stereo mono

Note

This TV cannot select any format other than 4:3.

PROGRAMME TABLE

Using the Programme Table

On this table, you can see which channel is preset to which programme position. You can also select programmes using this table.

- 1 Press MENU to display the main menu.
- 2 Select "Programme Table" with **△+** or **▽-** and press OK. The PROGRAMME TABLE menu appears. (See Fig. 36.)
- 3 Select the programme number with **△+** or **▽-** and press OK. The selected programme appears.
- 4 To scroll to higher programme numbers, press **▽-**.
- 5 Press MENU to return to TV picture.

PROG CH	LABEL	PROG CH	LABEL
13 C29	21 C56	.....
14 C30	22 C57	.....
15 C32	23 S23	.....
16 C33	24 S23	.....
17 C34	25 S26	.....
18 C40	26 S26	.....
19 C42	27 S18	.....
20 C46	28 S15	.....

Fig. 36
PROGRAMME TABLE
Select **OK** and press OK

TIMER

Using the Sleep Timer

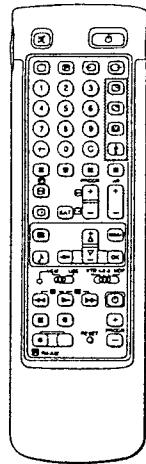
You can select a time period after which the TV automatically switches into standby mode.

- 1 Press MENU to display the main menu.
- 2 Select "Timer" with **△+** or **▽-** and press OK. The TIMER menu appears. (See Fig. 37.)
- 3 Press OK. The time period option changes colour.
- 4 Select the time period with **△+** or **▽-**. The time period (in minutes) changes as follows:
10 → 20 → 30 → 40 → 50 → 60 → 70 → 80 → 90
- 5 After selecting the time period, press OK. The cursor moves back to the left margin and the timer starts counting. One minute before the TV switches into standby mode, a message is displayed on the screen.
- 6 Press MENU to return to TV picture.

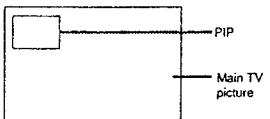
TIME	OFF
Sleep Timer (off)	Off

Fig. 37
TIME
Select **OK** and press OK

1-7. PIP (PICTURE IN PICTURE)



With this function you can display a "PIP screen" (small picture) within the main TV picture. In this way you can watch or monitor the video output from any connected equipment (for example from a VTR) while watching TV or vice versa. For information about connection of other equipment, refer to page 22.



Switching PIP on and off

Press **C**.

The PIP screen will be displayed. The PIP picture will come from the source chosen when the TV was last used.

To Switch PIP off

Press **C** again.

Selecting a PIP source

- 1 Press **t**.
The symbol **t** will be displayed at the bottom, left-hand corner of the screen.
- 2 Press **-C** repeatedly until the desired PIP source is indicated (e.g. TV, AV1, AV2, YC2, AV3, YC3, AV4, YC4).

Note

If no video source has been connected, the PIP picture will be noisy.

Swapping screens

Press **C**.

The main screen will switch the picture with the PIP screen.

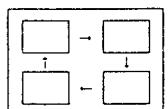


Notes

- If a TV programme is on the PIP screen and a video source on the main picture, and you want to change channels, first press **t** and then the programme number buttons or PROGR +/-.
- Swapping screens takes about 2 seconds after pressing **C**.
- After swapping screens if the colour systems of the main and PIP pictures are different, the PIP picture first appears in black and white and then in colour.

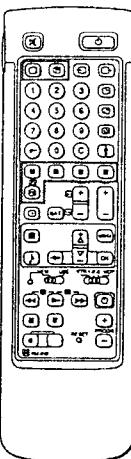
Changing the position of the PIP

Press **C** repeatedly to change the position of the PIP screen within the main screen. There are four different positions available.



1-8. TELETEXT

TV stations broadcast an information service called Teletext via the TV channels. Teletext service allows you to receive various information pages such as weather reports or news at any time you want. For advanced teletext operation, use the buttons on the Full-Function side of the Remote Commander.



Direct Access Functions

Switching Teletext on and off

- 1 Select the TV channel which carries the teletext broadcast you want to watch.
- 2 Press **B** to switch on teletext.
A teletext page will be displayed (usually the index page). If there is no teletext broadcast, "No text available" is displayed on the information line at the top of the screen.

To switch teletext off

Press **C**.

Selecting a teletext page

With direct page selection

Use the number buttons to input the three digits of the chosen page number.
If you have made a mistake, type in any three digits. Then re-enter the correct page number.

With page-catching

- 1 Select a teletext page with a page overview (e.g. index page).
- 2 Press **B** twice. "Page catching" will be displayed on the information line. The last digit of the first displayed page number flashes.
- 3 Using **Δ** or **▽**, select the desired page and press **OK**. The requested page will appear in a few seconds.

Accessing next or preceding page

Press **B** (PAGE+) or **C** (PAGE-).
The next or preceding page appears.

Superimposing the teletext display on the TV programme

- Press **B** once in teletext mode or twice in TV mode.
- Press **B** again to resume normal teletext reception.

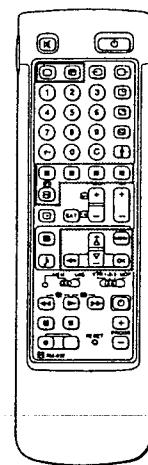
Preventing a teletext page from being updated

- Press **B** (HOLD). The HOLD symbol "**H**" is displayed on the information line.
- Press **B** to resume normal teletext reception.

Using Fastext

With Fastext you can access pages with one key stroke.
When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons on the Remote Commander.

Press the corresponding coloured button on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed after a few seconds.



Note
Some of the features
may not be available
depending on the
Teletext service.

Press OK to select
'OFF' for the TIME
PAGE setting to cancel
the request.

Using the Teletext Menu

This TV is provided with a menu-guided teletext system. When teletext is switched on, you can use the menu buttons to operate the teletext menu. Select the teletext menu functions in the following way:

- 1 Press MENU. The menu will be superimposed on the teletext display. (See Fig. 38.)
- 2 Using $\Delta+$ or $\nabla-$, select the teletext function you want and press OK. (See Fig. 39.)

USER PAGES/PRESET USER PAGES

See page 21 for information about presetting and operating the user pages.

INDEX

The index will give you an overview of the contents of the teletext and the page numbers.

TOP/BOTTOM/FULL

For convenient reading of a teletext page, you can enlarge the teletext display. After selecting the function, an information line △ Top ▽ Bottom OK Full will be displayed. (See Fig. 40.)

Press $\Delta+$ or Top for the upper half, $\nabla-$ for Bottom to enlarge the lower one and OK for Full to resume the normal size. Press \odot to resume normal teletext reception.

TEXT CLEAR

After selecting the function, you can watch a TV programme while waiting for a teletext page to be displayed. (See Fig. 41.) Press \odot to resume normal teletext reception.

SUBTITLES

Your teletext service will inform you if a TV programme is subtitled. After having selected the function the subtitles will be displayed.

REVEAL

Sometimes Pages contain concealed information, such as answers to a quiz. The reveal option lets you disclose the information. After selecting the function, an information line Reveal on/off will be displayed. (See Fig. 42.)

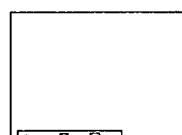
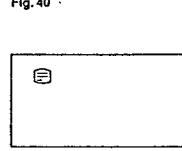
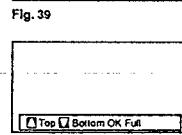
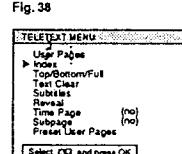
Using $\Delta+$ or $\nabla-$, select ON to reveal the information of OFF to conceal it again.

Press \odot to resume normal teletext reception.

TIME PAGE

Your teletext service will inform you, if a time coded page is available. You may have a page (e.g. an alarm page) displayed at a certain time.

- 1 Using $\Delta+$ or $\nabla-$, select "ON". Press OK. The TV programme you were watching before you selected TIME PAGE is restored. An information window will be displayed at the bottom of the page.
- 2 To select the desired page, enter three digits for the page number (e.g. 301) using the number buttons and press OK.
- 3 To select the desired time, enter four digits for the desired time (e.g. 1800) using the number buttons and press OK. The selected time is displayed at the top in the left-hand corner. At the requested time, the page will be displayed. Press \odot to resume normal teletext mode.



To cancel the request
Select SUBPAGE and
press OK.

If two broadcasting
stations use the same
Teletext
You can preset one
bank to 2 different
programme positions.

SUBPAGE

You may want to select a particular teletext page from several subpages which are rotated automatically. After having selected the function, an information line will be displayed.

To select the desired subpage, enter four digits using PROGR. +/- or the number buttons (e.g. enter 0002 for the second page of a sequence).

User Page Bank System

You can store up to 30 pages in the "teletext page bank system" in this way you have quick access to the pages you watch frequently.

Storing pages

There are 5 "banks" (A to E) for 5 teletext stations. In each bank you can store 6 preferred pages (P1 to P6).

- 1 Press \odot (if Teletext is not already on) and MENU to show the TELETEXT MENU display.
- 2 Select "Preset User Pages" with $\Delta+$ or $\nabla-$ and press OK.
- 3 Select the desired bank with $>+$ or $<-$ and press OK. The cursor will go to the first position (p1) of the preferred pages.
- 4 Input the three digits of your first preferred page with the number buttons. The cursor will go to the second position.
- 5 Repeat step 4 for the other 5 page numbers you want to preset. If you do not want to preset all 6 page numbers available, press OK without inserting any number.
- 6 Select "Allocate Bank" with $\Delta+$ or $\nabla-$ and press OK.
- 7 Select the programme position on which you want to store the preset pages with $\Delta+$ or $\nabla-$ and press OK. (See Fig. 43)
- 8 Select the desired bank with $\Delta+$ or $\nabla-$ (Banks A to E are available) and press OK.
- 9 Repeat steps 3 to 8 for the other 4 banks available.

Displaying User Pages.

- 1 Select MENU.
- 2 Select "User Pages" with $\Delta+$ or ∇ and press OK. A table of the stored preferred pages will be displayed. (See Fig. 44.)
- 3 Select the desired page with $\Delta+$ or ∇ and press OK. The page will be displayed after some seconds.



Fig. 43

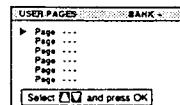
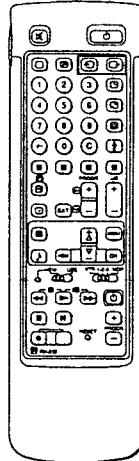


Fig. 44

Selecting Input with PROGR +/- or number buttons
 You can preset video input sources to the programme positions so that you can select them with PROGR +/- or number buttons. For details, see "Preset channels manually" on page 10.



Selecting input and output

This section explains how to view the video input picture (of the video source connected to your TV), and how to select the output signal using direct access buttons or the menu system.

Selecting input

Press \ominus repeatedly to select the input source.

The symbol of the selected input source will appear. (See Fig. 45.)

To go back to the normal TV picture

Press \square .

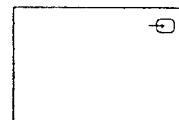


Fig. 45

Input modes

Symbol	Input signal
\ominus 1	Audio/video input through the \ominus 1 connector
\ominus 2	Audio/RGB input through the \ominus 1 connector
\ominus 2	Audio/video input through the \ominus 2 / \ominus 2 connector
\ominus 2	Audio/S video input through the \ominus 2 / \ominus 2 or \ominus 2 connector (4-pin connector)
\ominus 3	Audio/video input through \ominus 3 and \ominus 3 on the front
\ominus 3	Audio/S video input through the \ominus 3 (4-pin connector) and \ominus 3 connectors
\ominus 4	Audio/video input through the \ominus 4 / \ominus 4 connector
\ominus 4	Audio/S video input through the \ominus 4 / \ominus 4 or \ominus 4 connector (4-pin connector)

You can also select the input mode using the \ominus and \oplus buttons on the TV. In this case, first select \ominus , and then press \oplus buttons to select the input.

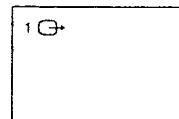


Fig. 46

Selecting the output

The \ominus 2 / \ominus 2 connector outputs the source input from the other connectors.

Press \ominus repeatedly to select the output.

The symbol of the selected output source appears. (See Fig. 46.)

Output modes

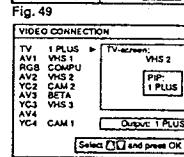
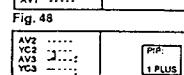
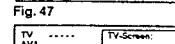
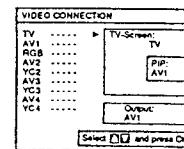
Symbol	Output mode
1 \ominus	Audio/video signal from the \ominus 1 connector
2 \ominus	Audio/video signal from the \ominus 2 / \ominus 2 connector
2 \ominus	Audio/S video signal from the \ominus 2 / \ominus 2 or \ominus 2 connector (4 pin)
3 \ominus	Audio/video signal from the \ominus 3, \ominus 3 connectors
3 \ominus	Audio/S video signal from the \ominus 3, \ominus 3 connectors
4 \ominus	Audio/video signal from the \ominus 4 / \ominus 4 connector
4 \ominus	Audio/S video signal from the \ominus 4 / \ominus 4 or \ominus 4 connector (4 pin)
TVC	Audio/video signal from the TV aerial terminal

When recording
when you use the \bullet (record) button, make
sure to press this button
and the \square to the right
of it simultaneously.

Checking and selecting the input and output sources using the menu

You can display the menu to see which input sources are selected for the TV screen and PIP screen, and which output source is selected. You can also select them on the menu display.

- 1 Press MENU to display the main menu.
- 2 Select "VIDEO CONNECTION" with Δ or ∇ and press OK. The VIDEO CONNECTION menu appears. (See Fig. 47.) You can see which source is selected for the TV and PIP input and for the output. If you want to select the input and output on this menu, go to the next step.
- 3 Select TV-screen (input source for the TV screen), PIP (input source for the PIP screen), or Output (output source) with Δ or ∇ and press OK. One of the source items changes colour. (See Fig. 48.)
- 4 Select the desired source with Δ or ∇ . (See Fig. 49.) For details about each source, see the table on page 23.
- 5 Press OK. The selected source is confirmed, and the cursor appears. (See Fig. 50.)
- 6 Repeat steps 2 to 4 to select the source for other inputs or outputs.
- 7 Press MENU to return to TV picture.

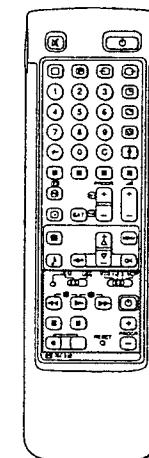


Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most of Sony remote-controlled video equipment such as: Beta, 8 mm and VHS VTRs and video disc players.

Tuning the Remote Commander to the equipment

- 1 Set the VTR 1/2/3 MDP selector according to the equipment you want to control:
 VTR1: Beta VTR
 VTR2: 8 mm VTR
 VTR3: VHS VTR
 MDP: Video disc player
- 2 Use the buttons indicated in the illustration to operate the additional equipment.
 If your video equipment is furnished with a COMMAND MODE selector, set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.
 If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.



1-10. FOR YOUR INFORMATION

Remote Control of Non-sony equipment

The TV Remote Commander is programmable. This allows it to memorize the functions of other Remote Commanders using the keys shown in the illustration. A function may be set on any key and on any of the four positions of the VTR 1/2/3 MDP selector.

Note

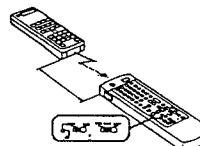
- Do not move the two Remote Commanders during programming.
- Once the programming has been completed, ensure that the new functions are working properly. Occasionally, a function cannot be memorized.
- When replacing the batteries of the Remote Commander, the new functions will remain memorized for thirty minutes, even if the batteries are missing.

Memorizing the functions of audio and video equipment not made by Sony.

- 1 Set the MEM/USE selector to the MEM (programming) position.
- 2 Set the VTR 1/2/3 MDP selector to the desired position.
- 3 Arrange the two Remote Commanders facing each other as illustrated.
- 4 Press the TV Remote Commander button on which a function is to be programmed. The MEM indicator will light on the TV Remote Commander.
Note: If the MEM indicator flashes 8 times, there is no more space in the memory.
- 5 Press the button on the other Remote Commander for the function that is to be memorized. The function will be memorized immediately after the MEM indicator goes off.
- 6 Repeat steps 4 and 5 for all the functions that are to be programmed. If all the buttons of one position of the VTR 1/2/3 MDP selector have been given new functions, you will be able to select a new position and proceed with the programming of the remaining functions.
- 7 Once programming has been completed, set the MEM/USE selector of the TV Remote Commander to the USE position.
- 8 When using audio or video equipment, confirm that the VTR 1/2/3 MDP selector of the TV Remote Commander is set to the same position as the one found during programming.

Cancelling the programmed functions

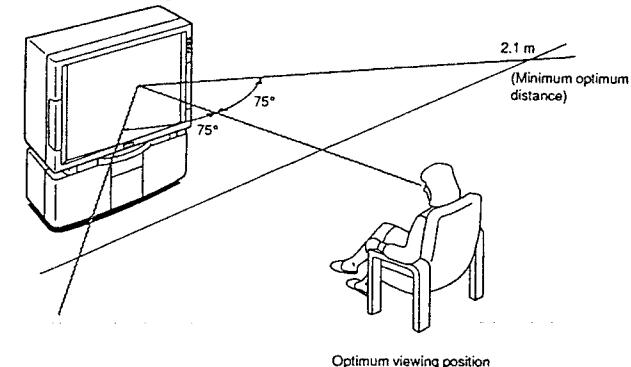
- 1 Set the MEM/USE selector to the MEM position.
- 2 Set the VTR 1/2/3 MDP selector to the position corresponding to the function that is to be deleted.
- 3 Press any programmable button. The MEM indicator will light.
- 4 Press the RESET button using a pencil. The MEM indicator will flash. Keep pressing the RESET button as long as the MEM indicator is flashing. All the functions programmed at this position will be deleted.
- 5 Set the MEM/USE selector to the USE position.



Optimum Viewing Area

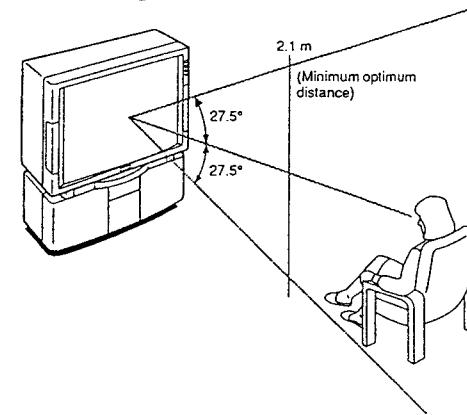
For the best picture quality, try to position the projection TV so that you can view the screen from within the areas shown below.

Horizontal viewing area



Optimum viewing position

Vertical viewing area



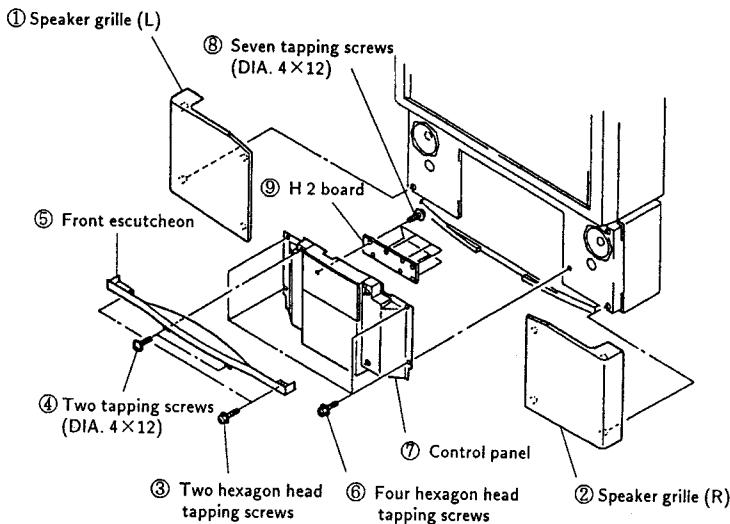
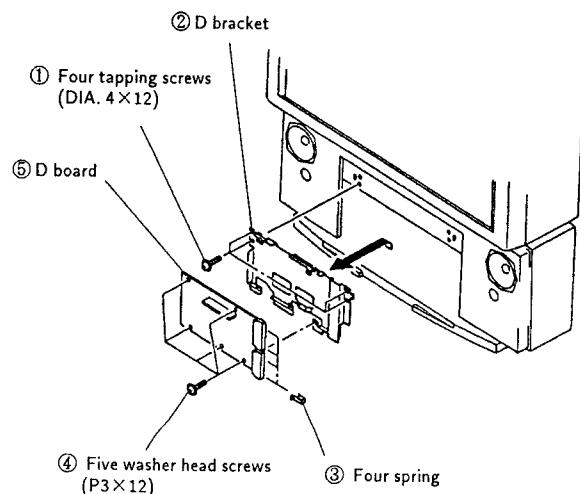
Optimum viewing position

Troubleshooting

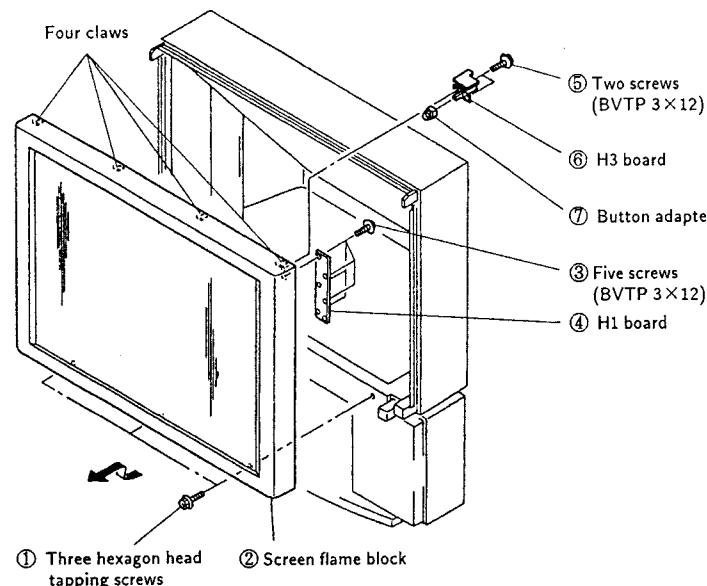
Here are some simple solutions to some problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	<ul style="list-style-type: none">• Plug in the TV in.• Press \odot on the TV (if \odot indicator is on, press \odot or a programme number on the Remote Commander).• Check the aerial connection.• Check if the selected video source is on.• Turn the TV off for three or four seconds and then turn it on again using \odot.
Poor or no picture (screen is dark), but sound is OK	<ul style="list-style-type: none">• Press \blacksquare to enter the PICTURE CONTROL menu and adjust the BRIGHTNESS, CONTRAST and COLOUR.
Good picture but no sound	<ul style="list-style-type: none">• Press Δ +.• Check loudspeakers connection.• If \times is displayed on the screen, press \times.
No colour for colour programmes	<ul style="list-style-type: none">• Press \blacksquare to enter the PICTURE CONTROL menu, select RESET, then press OK.
Remote Commander does not function	<ul style="list-style-type: none">• The batteries are weak.• Set the MEM/USE selector to the USE position.

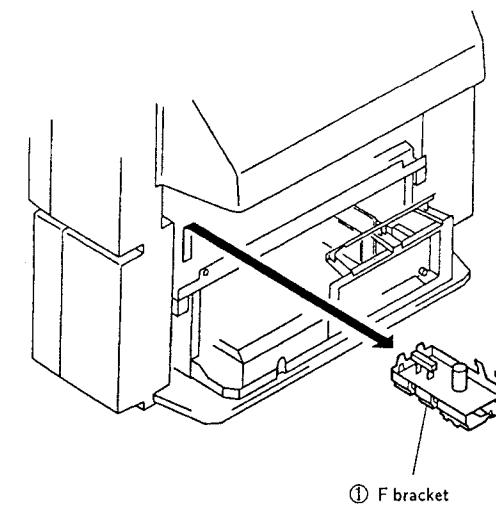
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

SECTION 2
DISASSEMBLY**2-1. H 2 BOARD REMOVAL****2-2. D BOARD REMOVAL**

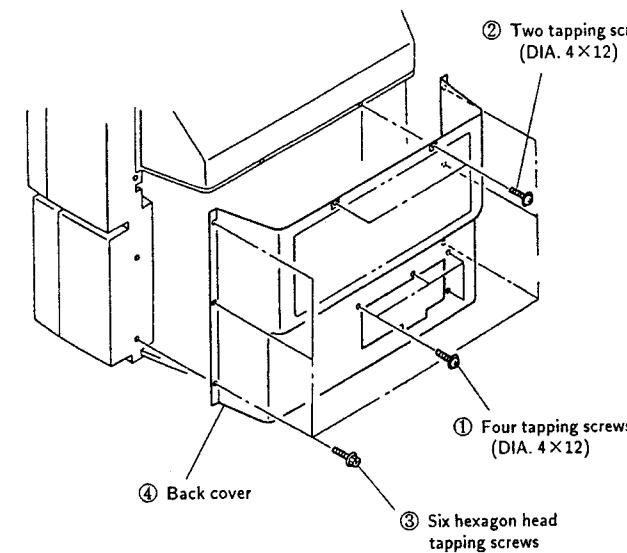
2-3. H1 AND H3 BOARDS REMOVAL



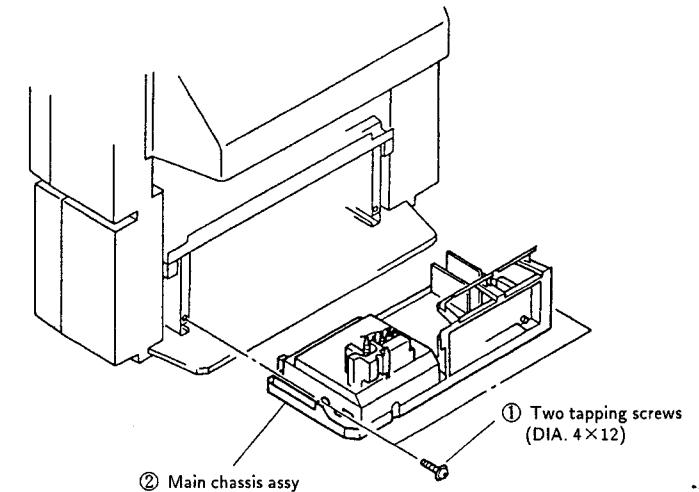
2-5. F BRACKET REMOVAL



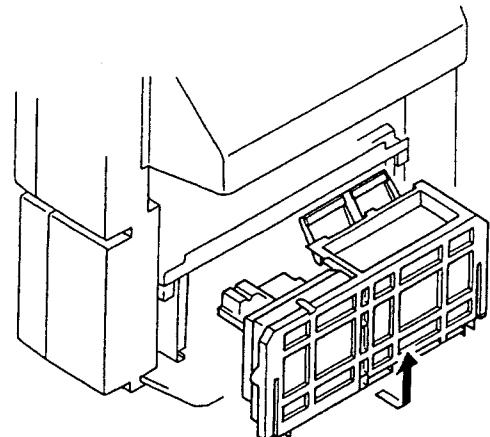
2-4. BACK COVER REMOVAL



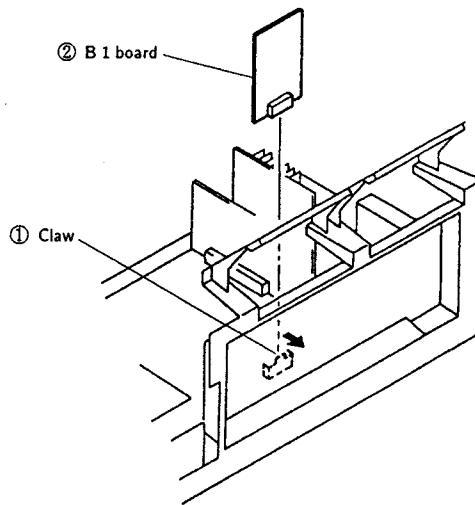
2-6. MAIN CHASSIS ASSY REMOVAL



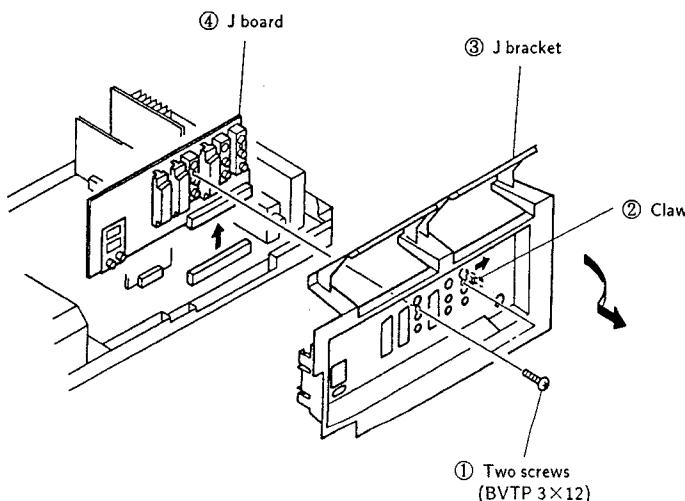
2-7. SERVICE POSITION



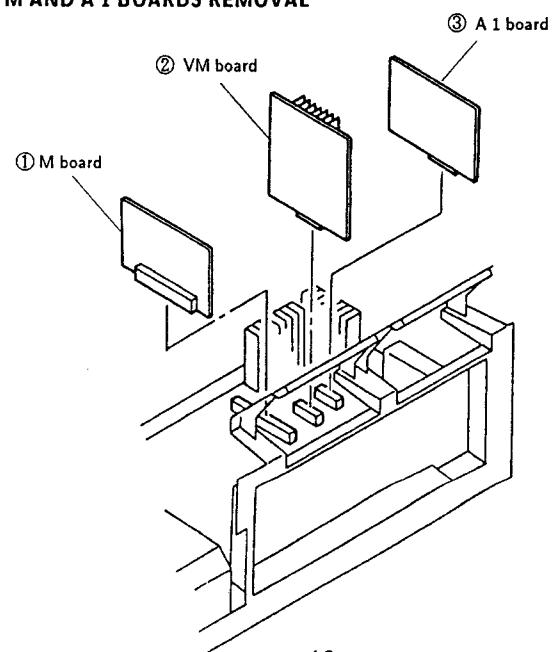
2-9. B 1 BOARD REMOVAL



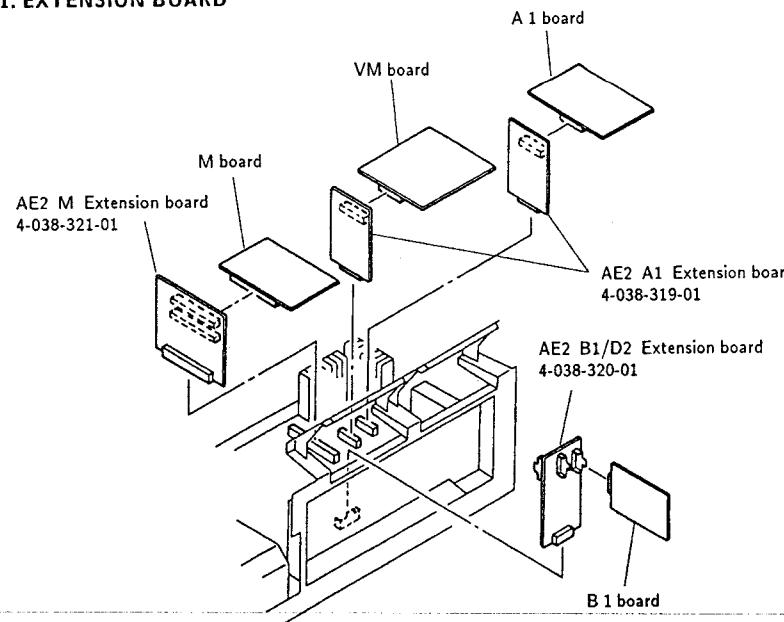
2-8. J BRACKET AND J BOARD REMOVAL



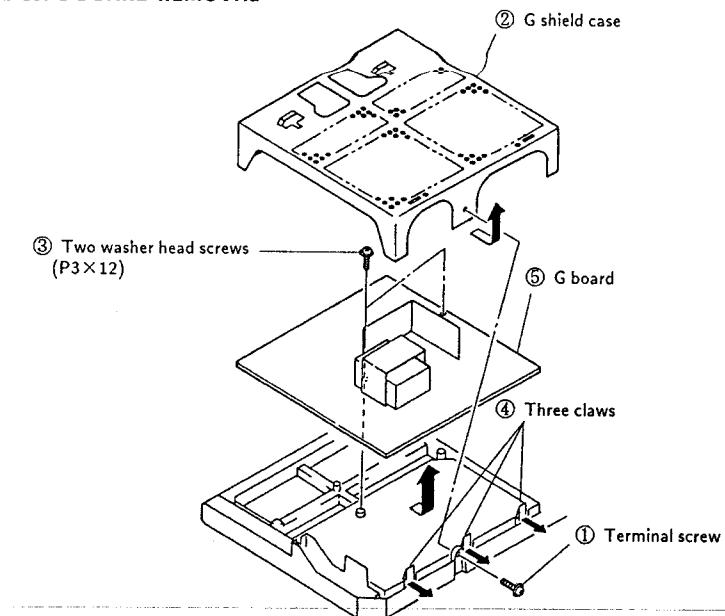
2-10. M, VM AND A 1 BOARDS REMOVAL



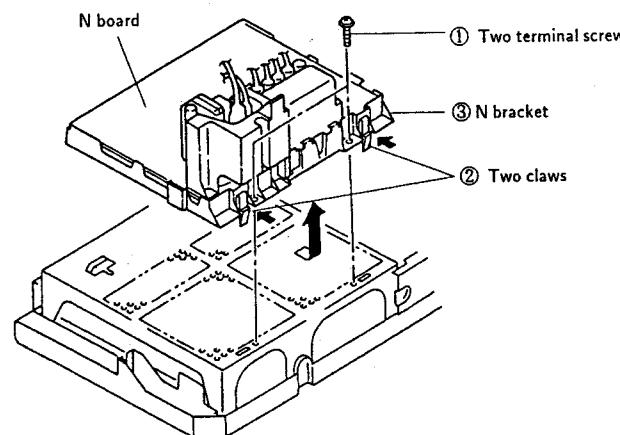
2-11. EXTENSION BOARD



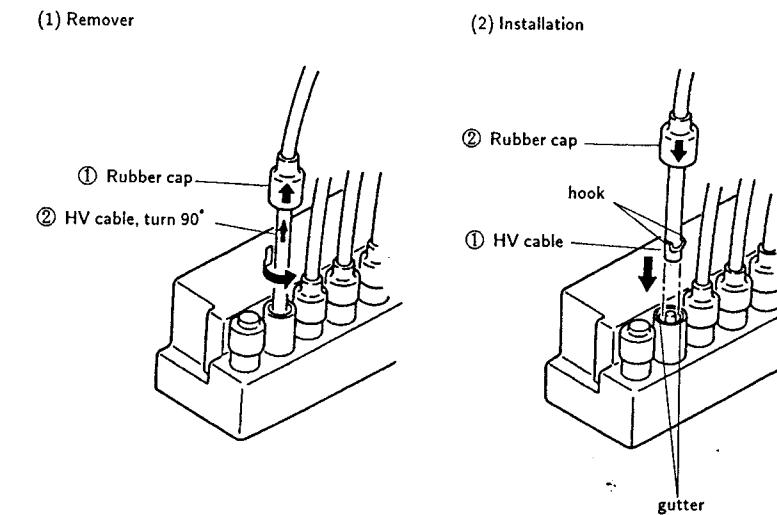
2-13. G BOARD REMOVAL



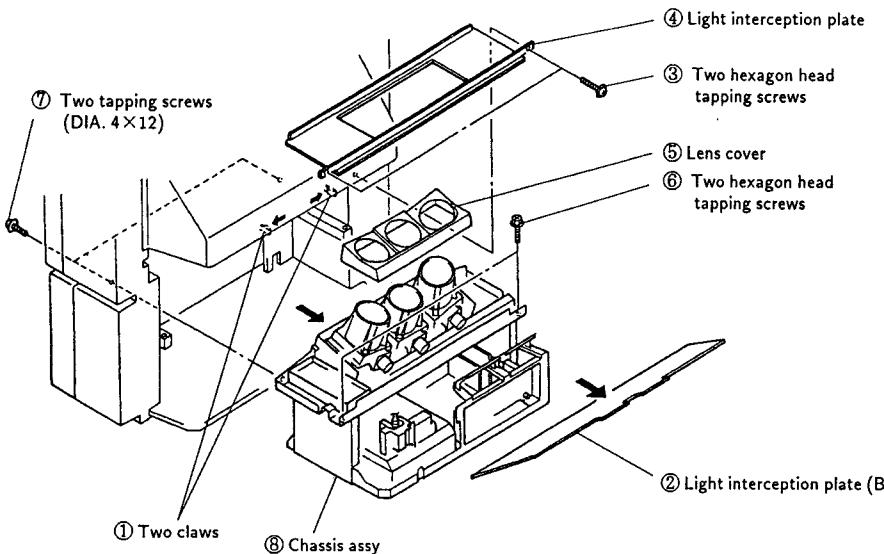
2-12. N BRACKET REMOVAL



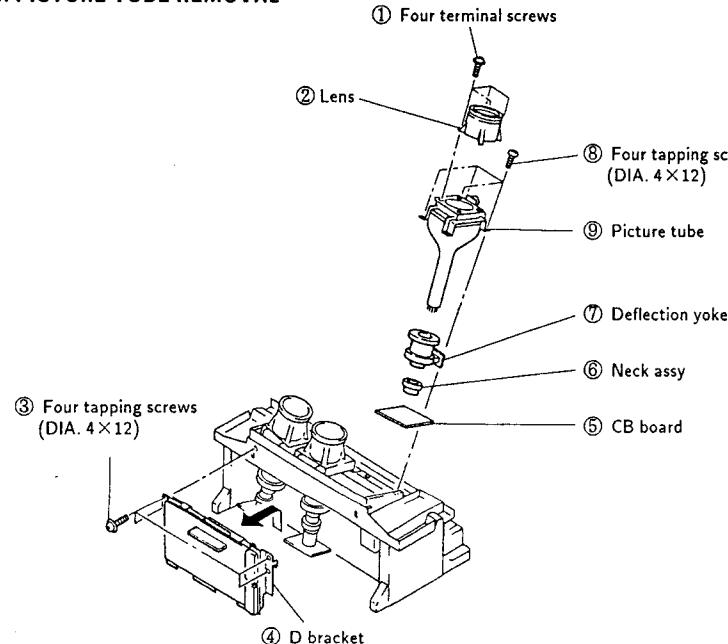
2-14. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL



2-15. CHASSIS ASSY REMOVAL

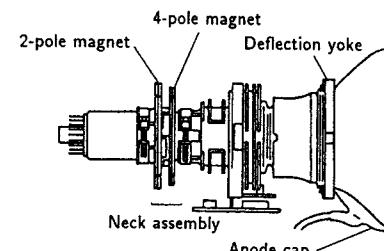


2-16. PICTURE TUBE REMOVAL

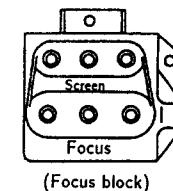
SECTION 3
SET-UP ADJUSTMENTS

3-1. FOCUS LENS ADJUSTMENTS

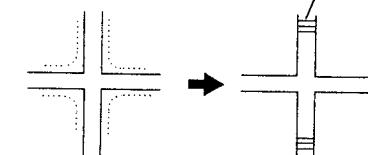
1. Set the D-board registration variable resistor (VR) and the position VR (CENTER VR) to mechanical.
2. Set the centering magnets (for red, green, and blue) to 0 as shown in the figure.



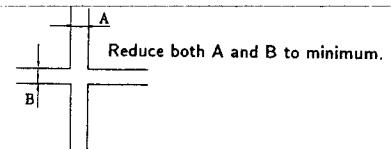
3. Input monoscope signal. Set 50% BRIGHTNESS and minimum PICTURE. Make rough adjustment so that 10IRE of the monoscope signal becomes faintly luminous.
4. Set PICTURE and BRIGHTNESS maximum. Press the commander menu button. Select CONVERGENCE to display test signal.
5. Enter service mode. Select R OFF of SERVICE MODE to cut off red output. Similarly, select B OFF to cut off blue output.
6. Turn the green lens to eliminate flare of the test signal.



Verify that scanning lines are seen.



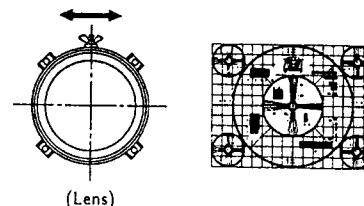
7. Turn the green focus VR in the focus block to adjust green focus to reduce both A and B of the test signal to minimum.



8. Repeat above 7. Couple of times to improve tracking and obtain an optimum lens focus. Then tighten the lens screws.

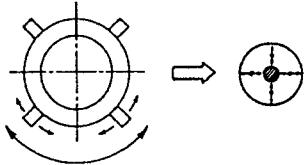
3-2. DEFLECTION YOKE POSITION
ADJUSTMENTS

1. Input monoscope signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output. Similarly, select B OFF to cut off blue output.
3. Loosen the deflection yoke (DY) fitting screws. Tilt the DY to obtain the best horizontal and vertical monoscope patterns.
4. After adjustment, press the DY onto the cathode ray tube (CRT) funnel and tighten the screws.
5. Also adjust DY positions for red and blue outputs in the same way.

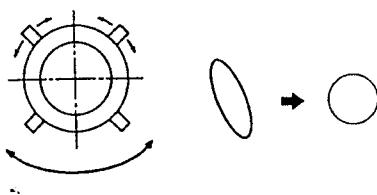


3-3. 2-POLE MAGNET ADJUSTMENT

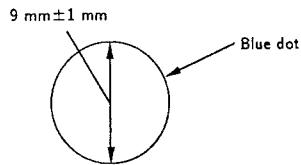
1. Input dot signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.
Similarly, select B OFF to cut off blue output.
3. Set PICTURE to maximum. Turn the green focus variable resistor (VR) in the focus block counterclockwise to brighten the point in the dot.
4. Adjust the 2-pole magnet to position the bright point at the center of the dot.
5. Adjust the red and blue dots in the same way.

**3-4. 4-POLE MAGNET ADJUSTMENT**

1. Input dot signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.
Similarly, select B OFF to cut off blue output.
3. Set PICTURE to maximum. Turn the green focus variable resistor (VR) in the focus block clockwise until the dot diameter becomes 15 mm to 20 mm.
4. Adjust the 2-pole magnet to make the dot perfectly round.
5. Adjust the red and blue dot in the same way.

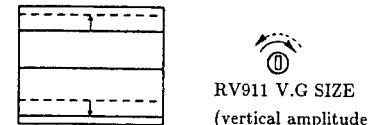
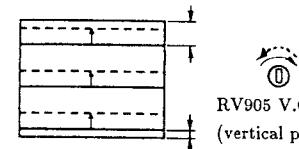
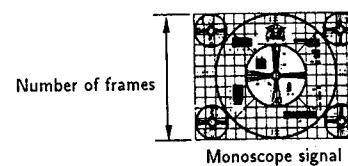
**3-5. DE-FOCUS ADJUSTMENT (BLUE)**

1. Input dot signal.
2. Turn the blue focus variable resistor (VR) in the focus block counter clock wise so that the diameter of the blue dot becomes $9 \pm 1\text{mm}$.

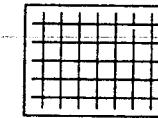
**3-6. GREEN PICTURE ADJUSTMENTS**

1. Input monoscope signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.
Similarly, select B OFF to cut off blue output.
3. Turn RV913 and RV960, the vertical green linearity variable resistors (V.G LIN VRs) on the D-board, to obtain an optimum vertical linearity. Then turn RV911, the vertical green amplitude variable resistor (V.G SIZE VR) to set vertical amplitude to 11.7 frames.

Note: The vertical position indicator of the monoscope signal must be positioned at the center by adjusting RV905, the vertical green center position variable resistor (V.G CENT VR) in advance.

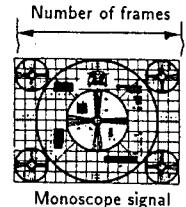


5. Verify that the horizontal lines on the top and bottom of cross-hatched area of the monoscope signal are horizontal and linear.



6. Turn RV916, RV964 and RV969, the horizontal green linearity variable resistors (H.G LIN VRs) on the D-board, to obtain an optimum horizontal linearity. Then turn RV908, the horizontal green amplitude variable resistor (H.G SIZE VR) to set horizontal amplitude to 15.6 frames.

Note: The horizontal position indicator of the monoscope signal must be positioned at the center by adjusting RV902, the horizontal green center position variable resistor (V.G CENT VR) in advance.

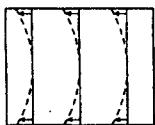
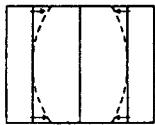
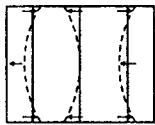
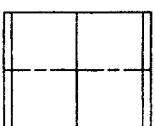
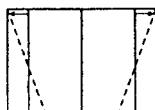
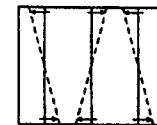
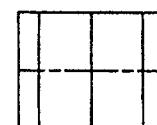
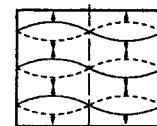
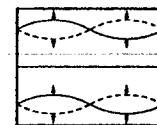
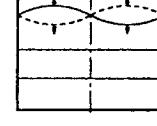
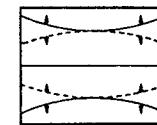
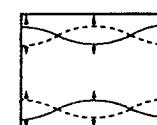
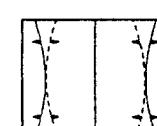


7. Input cross hatch signal. Turn vertical green (V.G) and horizontal green (H.G) variable resistors (VRs) and make adjustments according to the following steps :

(Adjustment procedure)

1. [BOW] → [SKEW] → [CENT (center position)]
2. [PIN (pin warp)] → [SUB BOW] → [BOW]
3. [KEYS (trapezoid)] → [SUB SKEW] → [SKEW]
4. [M.WAVE (middle sine wave warp)] → [WAVE-A (upper and lower sine wave warp)] → [WAVE-U (upper sine wave warp)]
※ For vertical (V) only.
5. [V-M.PIN (vertical middle pin warp)] → [V/WING (vertical wing warp)]
※ For vertical (V) only.
6. [H-M.PIN (horizontal middle pin warp)] → [WAVE-U (upper sine wave warp)]
※ For horizontal (H) only.

(Dot motion)

RV932 H.G BOW
(horizontal green bow)RV941 H.G PIN
(horizontal green pin warp)RV950 H.G SUB BOW
(horizontal green sub bow)V.G BOW.....RV935
V.G PIN.....RV938
V.G SUB BOW.....RV953RV920 H.G SKEW
(horizontal green skew)RV925 H.G KEYS
(horizontal green trapezoid)RV944 H.G SUB SKEW
(horizontal green sub skew)V.G SKEW.....RV923
V.G KEYS.....RV929
V.G SUB SKEW.....RV947RV962 V-M-WAVE
(vertical middle sine wave warp)RV975 V-WAVE-A
(vertical upper and lower sine wave warp)RV978 V-WAVE-U
(vertical upper sine wave warp)RV980 V.M. PIN
(vertical middle pin warp)
※ Common in red, green, and blueRV957 V/WING
(wing warp)
※ Common in red, green, and blueRV956 H/M. PIN
(vertical middle pin warp)

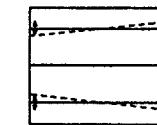
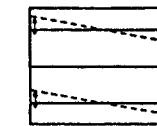
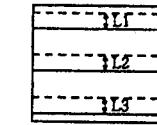
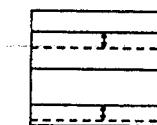
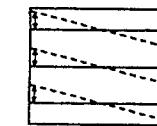
3-7. GREEN AND RED REGISTRATION ADJUSTMENTS

1. Input cross hatch signal.
2. Enter service mode. Select B OFF of SERVICE MODE to cut off blue output.
3. Turn the vertical red (V.R) and horizontal red (H.R) variable resistors (VRs) to adjust red picture convergence in relation to green picture according to the following steps :

(Adjustment procedure)

1. [LIN (linearity)] → [SIZE (amplitude)] → [CENT (center position)] → [BOW] → [SKEW] → [CENT (center position)]
2. [PIN (pin warp)] → [SUB BOW] → [BOW]
[H/M. PIN (horizontal middle pin warp)]
3. [KEYS (trapezoid)] → [SUB SKEW] → [SKEW]
4. [M.WAVE (middle sine wave warp)] → [WAVE-A (upper and lower sine wave warp)] → [WAVE-U (upper sine wave warp)]

(Dot motion)

RV912 V.B SIZE
(vertical red amplitude)RV952 V.R SUB BOW
(vertical red sub bow)RV943 V.R BOW
(vertical red bow)RV928 V.R KEYS
(vertical red trapezoid)RV948 V.R SUB SKEW
(vertical red sub skew)RV904 V.R CENT
(vertical red center position)RV917 V.R LIN
(vertical red linearity)RV922 V.R SKEW
(vertical red skew)

H.R LIN.....RV915
H.R SIZE.....RV907
H.R CENT.....RV901
H.R BOW.....RV931
H.R SKEW.....RV919
H.R PIN.....RV940
H.R KEYS.....RV926
H.R SUB BOW.....RV949
H.R SUB SKEW.....RV943
V-M-WAVE.....RV973
V-WAVE-A.....RV976
V-WAVE-U.....RV979
V-M.PIN.....RV980
V/WING.....RV957
H/M.PIN.....RV956

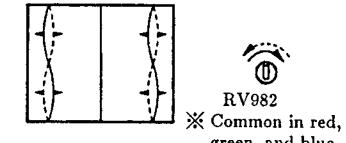
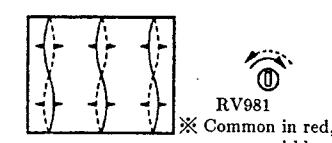
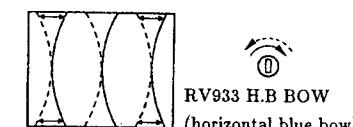
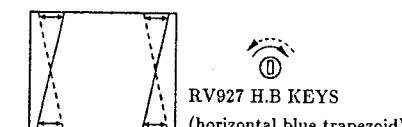
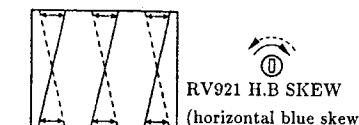
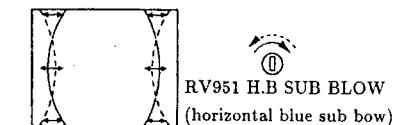
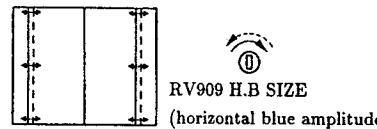
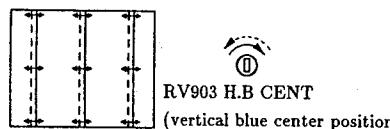
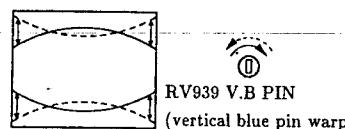
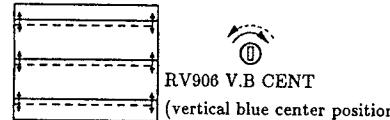
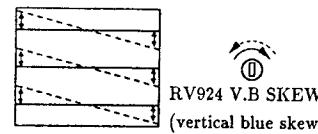
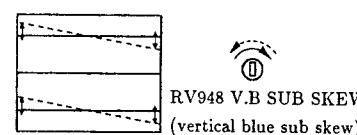
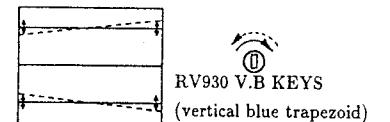
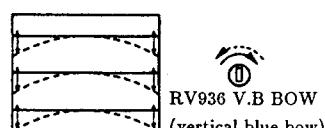
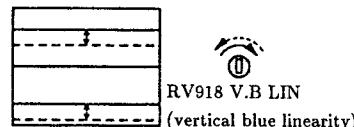
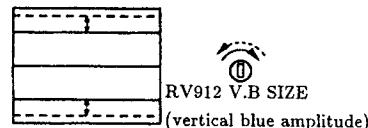
3-8. GREEN AND BLUE REGISTRATION ADJUSTMENTS

1. Input cross hatch signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.
3. Turn the vertical blue (V.B) and horizontal blue (H.B) variable resistors (VRs) to adjust blue picture convergence in relation to green picture according to the following steps:

(Adjustment procedure)

1. [LIN (linearity)] → [SIZE (amplitude)] → [CENT (center position)] →
2. [BOW] → [SKEW] → [CENT (center position)]
3. [PIN (pin warp)] → [SUB BOW] → [BOW]
[H/M. PIN (horizontal middle pin warp)]
4. [KEYS (trapezoid)] → [SUB SKEW] → [SKEW]
5. [M.WAVE (middle sine wave warp)] →
[WAVE-A (upper and lower sine wave warp)] →
[WAVE-U (upper sine wave warp)] →

(Dot motion)



H/M PIN RV958
 M.WAVE RV961
 WAVE-A RV974
 WAVE-U RV977

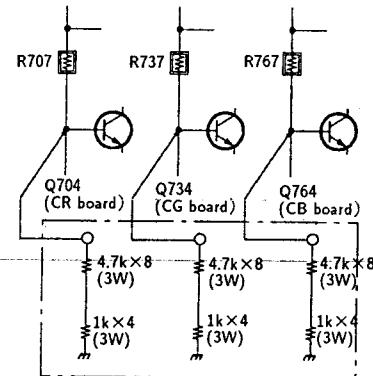
3-9. REGISTRATION ADJUSTMENTS

1. Out put red, blue, and green.
2. Out put cross hatch and monoscope signals to check registration. Also check focus.

3-10. WHITE BALANCE ADJUSTMENTS

1) Screen adjustment

1. Input white signal.
2. Remove connectors CR-15, CG-16, and CB-17.
3. Fit jigs between the ground and R707, R737, and R767.



※ Resistors in each jig are connected serial.

4. Turn the RGB (red, green, and blue) screen variable resistors in the focus block to make the flyback line faint. Stop before the line completely disappears.
5. Insert connectors CR-15, CG-16, and CB-17.

2) White balance adjustments (09, 14, 15, 16, 17)

1. Input monoscope signal and enter service mode.
2. Select the picture quality adjustment from the menu and set PICTURE minimum. Select the CXA1587S service item.
3. Use the commander to adjust 09 (SUB BRIGHT) so that 10IRE of the monoscope pattern becomes faintly luminous.
4. Input white signal.
5. Set PICTURE minimum. Adjust item 16 (green cut off) and 17 (blue cut off) to obtain an optimum white balance.
6. Set PICTURE maximum. Adjust 14 (green-drive) and 15 (bluedrive) to obtain an optimum white balance.
7. Repeat white balance adjustment alternating PICTURE setting at the minimum and maximum.

SECTION 4

CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander, RM-832.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set while pressing any two buttons on the front panel.

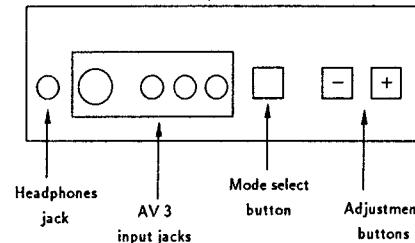


Fig.4-1

2. "TT" will appear on the upper right corner of the screen.

Command operation in service mode

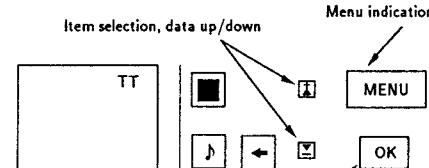


Fig.4-2

Fig.4-3

3. Press the [MENU] button of the commander to get the menu on screen.

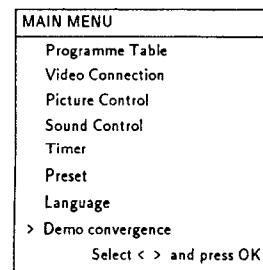


Fig.4-4

4. Press the [] and [] buttons of the commander and move > to DEMO.
5. Press [OK] button to proceed to the next menu.
6. The menu of fig.4-5 will appear on screen. Select DEVICE corresponding to the adjustment item from the table on next page.

DEVICE
Init
> CXA 1587
CXD 2018
TDA 9145
CXA 1526
TDA 6612
CX 7948 A
PIP
Select < > and press OK

Fig.4-5

7. If adjustment item is CXA 1587, press the [] button and move > to CXA 1587.

CXA 1587

Item No.	Adjustment item	Data Amount
01	PICTURE	53
02	COLOR	31
03	BRIGHT	31
04	HUE	31
05	SHARPNESS	7
06	RGB PICTURE	13
07	SUB CONTRAST	ADJ.
08	SUB COLOR	ADJ.
09	SUB BRIGHT	ADJ.
10	SUB HUE	7
11	VM LEVEL	2
12	NR LEVEL	0
13	ABL MODE	0
14	G-DRIVE	ADJ.
15	B-DRIVE	ADJ.

8. Press [OK] button to get the next selection menu.
9. Press [] button and move > to the adjustment item and press [OK] button.
10. Press the [] and [] buttons to change the data in order to comply each standard.
11. Press [OK] button to write data.
12. Turn off the power to quit service mode when completing the adjustment.

CXA 1587

Item No.	Adjustment item	Data Amount
01	PICTURE	53
02	COLOR	31
03	BRIGHT	31
04	HUE	31
05	SHARPNESS	7
06	RGB PICTURE	13
07	SUB CONTRAST	ADJ.
08	SUB COLOR	ADJ.
09	SUB BRIGHT	ADJ.
10	SUB HUE	7
11	VM LEVEL	2
12	NR LEVEL	0
13	ABL MODE	0
14	G-DRIVE	ADJ.
15	B-DRIVE	ADJ.
16	G-AUTO CUT OFF	ADJ.
17	B-AUTO CUT OFF	ADJ.
18	R-MANUAL CUT OFF	ADJ.
19	G-MANUAL CUT OFF	ADJ.
20	B-MANUAL CUT OFF	ADJ.
21	GAMMA LEVEL	0
22	DC TRANSFER RATIO	3
23	DINAMIC PICTURE	2
24	Y FILTER ADJ	ADJ.
25	Y DELAY TIME	15
26	Y DELAY SWITCH 1	0
27	Y DELAY SWITCH 2	1
28	SHARPNESS LIMIT	ON
29	ALL BLK	OFF
30	H SHIFT	32
31	DAC TEST	OFF
32	PRE/OVER SHOOT	7
33	SHARPNESS FO	2
34	SUB SHARPNESS	3
35	R MUTE	OFF
36	G MUTE	OFF
37	B MUTE	OFF

CXA 1526

Item No.	Adjustment item	Data Amount
01	DC SHIFT	32
02	UPPER Y BOW	4
03	LOWER Y BOW	5
04	H.AMP	48
05	H TILT	29
06	UPPER COR BOW	32
07	UPPER TILT	32
08	LOWER COR BOW	32
09	LOWER TILT	32

Typical Value (OSD based)when receiving PAL Philips pattern.

TDA 6612	Adjustment item	Data Amount
	Stereo-Separation	30

Should be adjusted twice 4:3 and 16:9 mode.

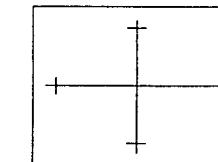
38	AGING 1	OFF
39	AGING 2	OFF
40	AKB	ON
41	INHIBIT RGB	OFF
42	FORCED RGB	OFF
43	V/2 V	OFF
44	AXIS	PAL
45	HUE SW	OFF
46	V EXTENTION	OFF
47	AFC 1	1
48	AFC 2	0
49	AFC	ON
50	REF.POSITION	0

CX 7948 a

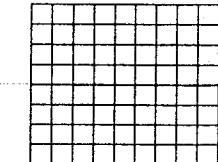
Cross Bar (off)
 Mesh (off)
 Fine Mesh (off)

Select Δ ∇ and press OK.

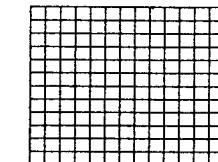
Cross Bar (on)



Mesh (on)



Fine Mesh (on)



SUB BRIGHTNESS ADJUSTMENT

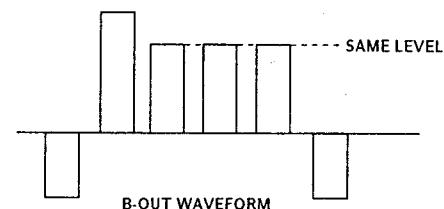
1. Input Phillips pattern.
2. Enter into service mode and press 23.
3. Adjust data so that 0-IRE of the grey scale and CUT -OFF 20-IRE glitter slightly.

SUB CONTRAST ADJUSTMENT

1. Input a video that contains small 100% area on the Black Back ground.
2. Enter into service mode and press 01 to have PIC max followed by 21.
3. Adjust data so that 2.5 Vp-p can be obtained at ① CN 0123 (R out).

SUB COLOR ADJUSTMENT

1. Input PAL color bar.
2. Connect an oscilloscope to CN 0125 ① pin (B OUT) on the A board.
3. Enter into service mode and press 22 of CXA 1587, 8 SUB COLOR.
4. Adjust data so that the right sides of the waveform will be the same.



STEREO-SEPARATION ADJUSTMENT

1. Input PAL RED pattern.
2. Connect an oscilloscope to CN 0123 ① pin (R OUT) on the A board.
3. Enter into service mode and press 3, 8.
4. Adjust data by Δ or ∇ to minimize the chroma element of CN 0123 ① pin.

DRIVE AND CUT OFF

See direct test mode list attached and refer to sub brightness or such for adjustment method.

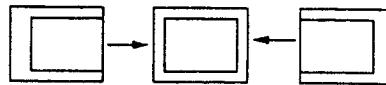
DEFLECTION SYSTEM ADJUSTMENT

1. Enter into service mode and select CXD 2018.
2. Select and adjust each item in order to get an optimum image.

CXD 2018

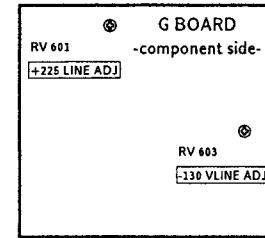
Item No.	Adjustment item	Data Amount
01	V SIZE	No ADJ.
02	V SHIFT	No ADJ.
03	S CORRECTION	No ADJ.
04	V LINEARITY	No ADJ.
05	H SIZE	No ADJ.
06	PIN AMP	No ADJ.
07	TILT	No ADJ.
08	UPPER CORNER	No ADJ.
09	LOWER CORNER	No ADJ.
10	V BOW	No ADJ.
11	ANGLE	No ADJ.
12	HV COMP.V	13
13	HV COMP.H	8
14	FRAME SHIFT	OFF
15	FREE RUN 60 Hz	OFF
16	SYSTEM 60 Hz	OFF
17	ASPECT WIDE	OFF
18	DOUBLE SCAN	OFF
19	NON INTERLACE	ON
20	H SHIFT	32
21	N/S CORRECTION	No ADJ.

H SHIFT



3. Press **OK** button to write the data.

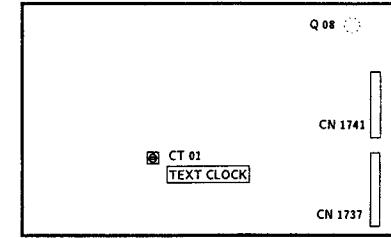
If menu display may disturb the adjustment press **OK** to clear, to resume it, press **OK** again.

4-2. G BOARD ADJUSTMENTS**+225 V LINE ADJUSTMENT (RV 601)**

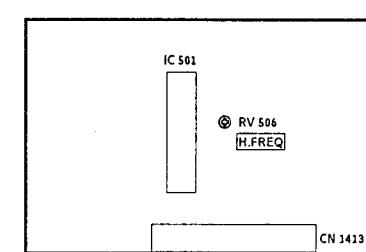
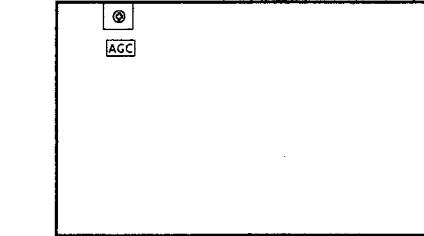
1. Input the color-bar signal.
2. Connect a digital multimeter to emitter of Q 604.
3. Adjust RV 601 so that voltage is $+225 \text{ V} \pm 0.5 \text{ V}$.

-130 V LINE ADJUSTMENT (RV 603)

1. Input the color-bar signal.
2. Connect a digital multimeter to emitter of Q 612.
3. Adjust RV 603 so that voltage is $-130 \text{ V} \pm 0.1 \text{ V}$.

4-4. V BOARD ADJUSTMENT**TEXT CLOCK ADJUSTMENT (CT 01)**

1. Get TEXT MENU on screen.
2. Connect GND and the base of Q 08 on V board.
3. Adjust CT 01 on V board so that the MENU stands still as much as possible.

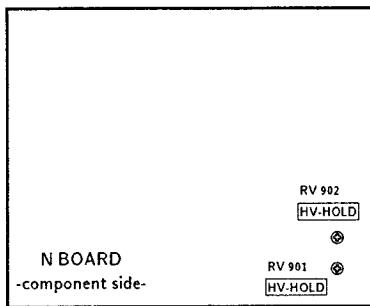
4-5. IF ADJUSTMENT**4-3. M BOARD ADJUSTMENT****AGC ADJUSTMENT (IF BLOCK)**

1. Receive off-air signal.
2. Adjust AGC VR so that there is no snow noise and cross-modulation.
3. Change receiving channel and confirm status.

H.FREQ ADJUSTMENT (RV 506)

1. Connect GND to **②** pin of IC 501 on M board.
2. Connect a frequency counter to **④** pin of IC 501.
3. Adjust RV 506 on M board to $15,625 + 100 \text{ Hz}$.
4. Remove **②** pin of IC 501 from GND.

4-6. N BOARD ADJUSTMENTS

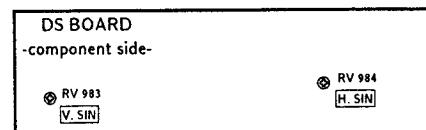
**HV-HOLD DOWN ADJUSTMENT**

1. Connect the HV meter.
2. Receive dot pattern.
3. Adjust HV to 33.5 ± 0.1 KV by RV 901.
4. Slowly turn the RV 902 till HV-HOLD DOWN work.
5. RV 902 fixed with RTV.

HV-REGULATOR ADJUSTMENT

1. Connect the HV meter.
2. Receive dot pattern.
3. Adjust HV to 31.5 ± 0.1 KV by RV 901.
4. RV 901 fixed with RTV.

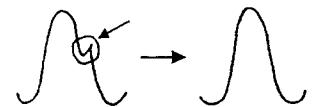
4-7. DS BOARD ADJUSTMENTS

**H. SIN ADJUSTMENT**

1. Connect an oscilloscope to pin ① of IC 1712 on DS board.
2. Adjust H. SIN by RV984.

V. SIN ADJUSTMENT

1. Connect an oscilloscope to pin ⑦ of IC 1712.
2. Adjust V. SIN by RV983.



Item	Model name
Pal Comb	ON
PiP	ON
RGB Priority	ON
Woofer Box	OFF
Scart 1	ON
Scart 2	ON
Front in (3)	ON
Scart 4	ON
Dyn. Convergence	OFF
Projector	ON
A × B in 16 : 9 mode	ON
Norm B/G	ON
Norm I	ON
Norm D/K	ON
Norm AUS	OFF
Norm L	ON
Norm SAT	OFF
Norm M	OFF
Language Preset	English

4-8. TEST MODE 2 :

Is available by pressing Test button two times, OSD "TT" appears. The functions described below are available by pressing the two numbers. To release the Test Mode 2, press two times 0, or switch TV in Standby Mode.

00	switch Test Mode 2 off
01	picture maximum
02	picture minimum
03	Volume 35%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Aging Condition (Volumin., Picture max., Brightness max., Aging 2 Mode of CXA 1587, TDA 2595 is locked to CXA 1587 via PIN 34 of μ-Con.)
08	Shipping Condition (Analog Values are RESET due to factory setting. Prog 1 is selected, TT Mode is switched off)
09	dummy
10	Tenth entry is deleted
11	Balance
12	Hue
13-14	dummy
15	Read factory setting from NVM Reads Volume, Balance, Treble, Bass, Brightness, Contrast, Hue, Sharpness, Colour values from ROM to the actual used values (Last Power Memory)
16	Save actual used values as RESET values Memorize actual used values Balance, Treble, Bass, Hue, Sharpness at RESET position in NVM
17	Preset Level for AV Sources
18	dummy
19	Stereo Separation
20	Tenth entry is deleted
21	Sub Contrast
22	Sub Colour
23	Sub Brightness
24-29	dummy

30	Tenth entry is deleted
31	Green Drive
32	Blue Drive
33	Green Cut Off (Auto Cut Off)
34	Blue Cut Off (Auto Cut Off)
35	Red Cut Off (Manual Cut Off) (Auto Cut Off is switched off)
36	Green Cut Off (Manual Cut Off) (Auto Cut Off is switched off)
37	Blue Cut Off (Manual Cut Off) (Auto Cut Off is switched off)
38	Y-Filter adjustment (Trap is switched off and TDA 9145 is switched in forced NTSC Mode)
39	dummy
40	Tenth entry is deleted
41	Default setting of CXA 1587 (Only in Plog 99 available)
42	Default setting of CXA 2018 (Only in Plog 99 available)
43	Default setting of CXA 1526 (Only in Plog 99 available)
44	(all Port High) Not yet
45	(all Port High) Not yet
46-48	dummy
49	Erase the NVM Testbyte (this byte detects already stored NMV's) After selecting this function, switch TV Off and On → the NVM will be preset by μ-Controller. (Not the channel data)

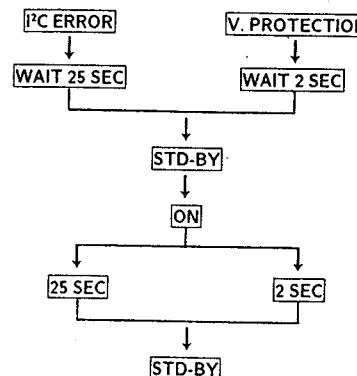
Note: For No. 35, 36, 37 and 38 special pressing (AKB, forced Color Mode, Trap) is selected.
After selecting a new Test Mode Number, the AKB is switched ON, the Trap is switched On and TDA 9145 is switched to Auto Search Mode.

In Test Mode 2 the Menu display is switchable by Speaker-Off button.

4-9. ERROR MESSAGE

Self diagnosis system operates as follows.

- When MP can't get the acknowledge back from the device, LED starts flashing according to the table as attached.



In case of more errors in parallel, the blinking error shows max. Priority according to the error number (e.g. error 2 and error 5 appears together, then LEDs shows error 2).

TABLE OF ERRORS

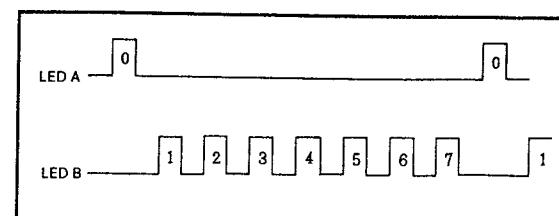
ERROR COUNT	IC TYPE	FUNCTION
1	I²C BUS	SDA low
2	X 24 C 16	EEPROM
3	SDA 3202	Tuner PLL
4	TDA 9145	Colour decoder
5	CXA 1587	RGB/Jungle
6	TDA 6612	Sound processor
7	CXD 2018	V deflection
8	CXA 1545	AV switch
11	SDA 5248	Text
13		V protection

Stand by LED
blinking
No IR return

4-10. ERROR I²C BUS DIAGNOSIS SYSTEM

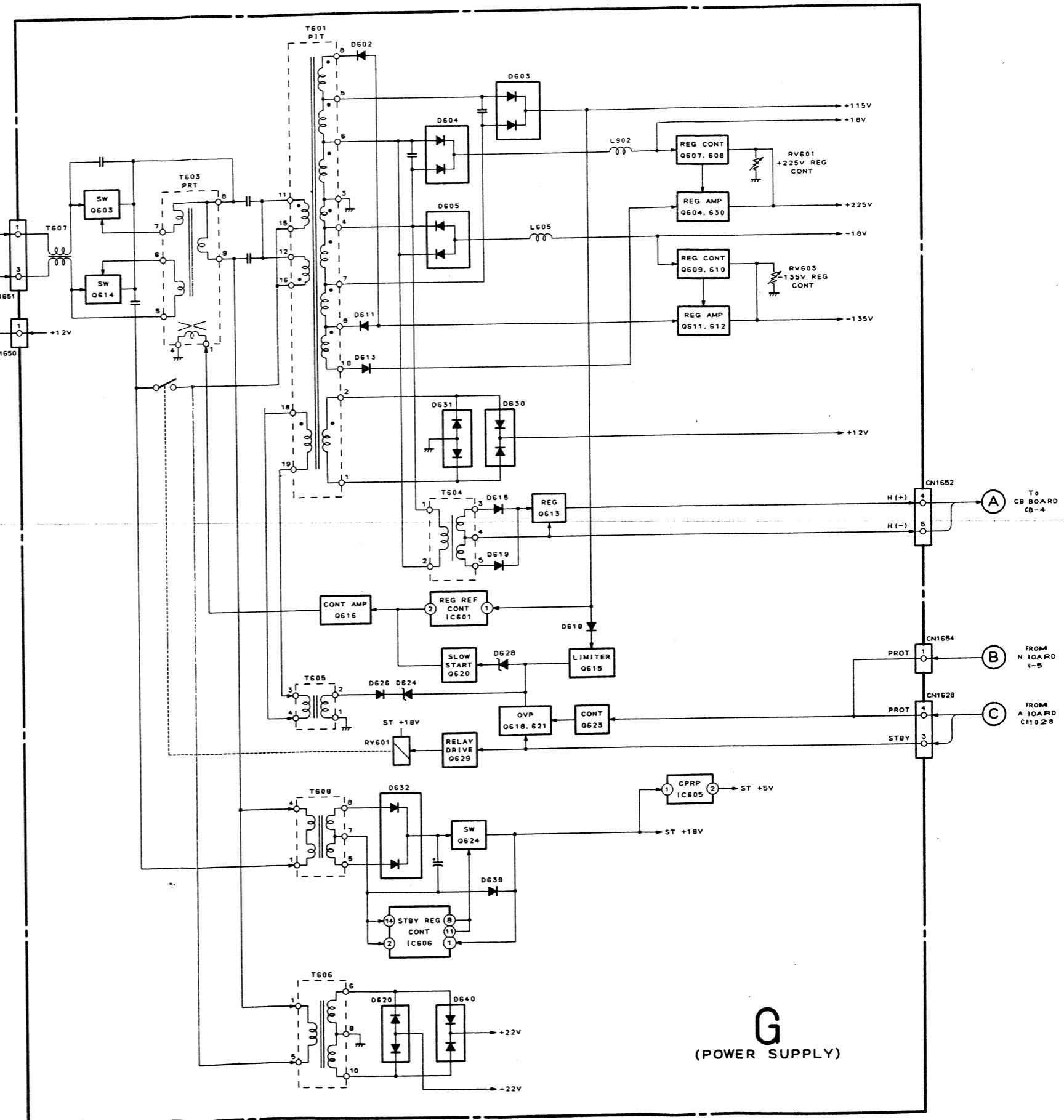
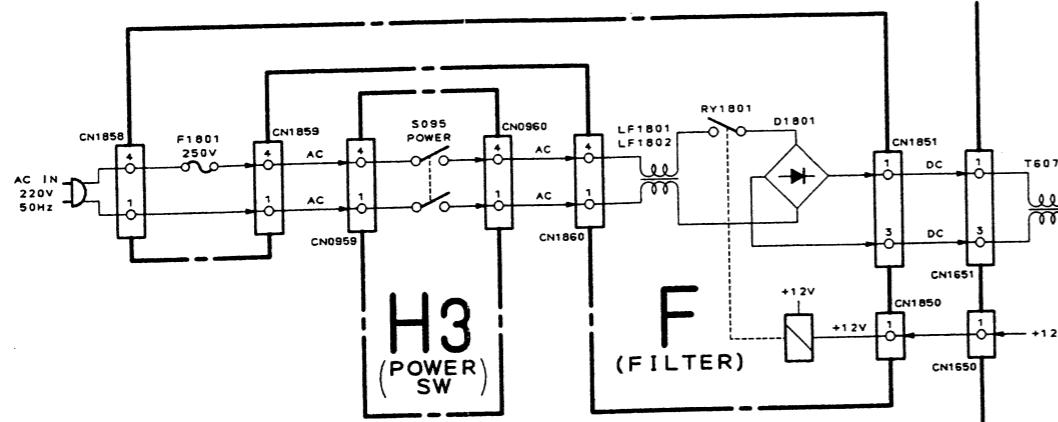
For all ICs in AE 2 chassis which are necessary to get picture and sound there is a built in error I²C Bus diagnosis system.

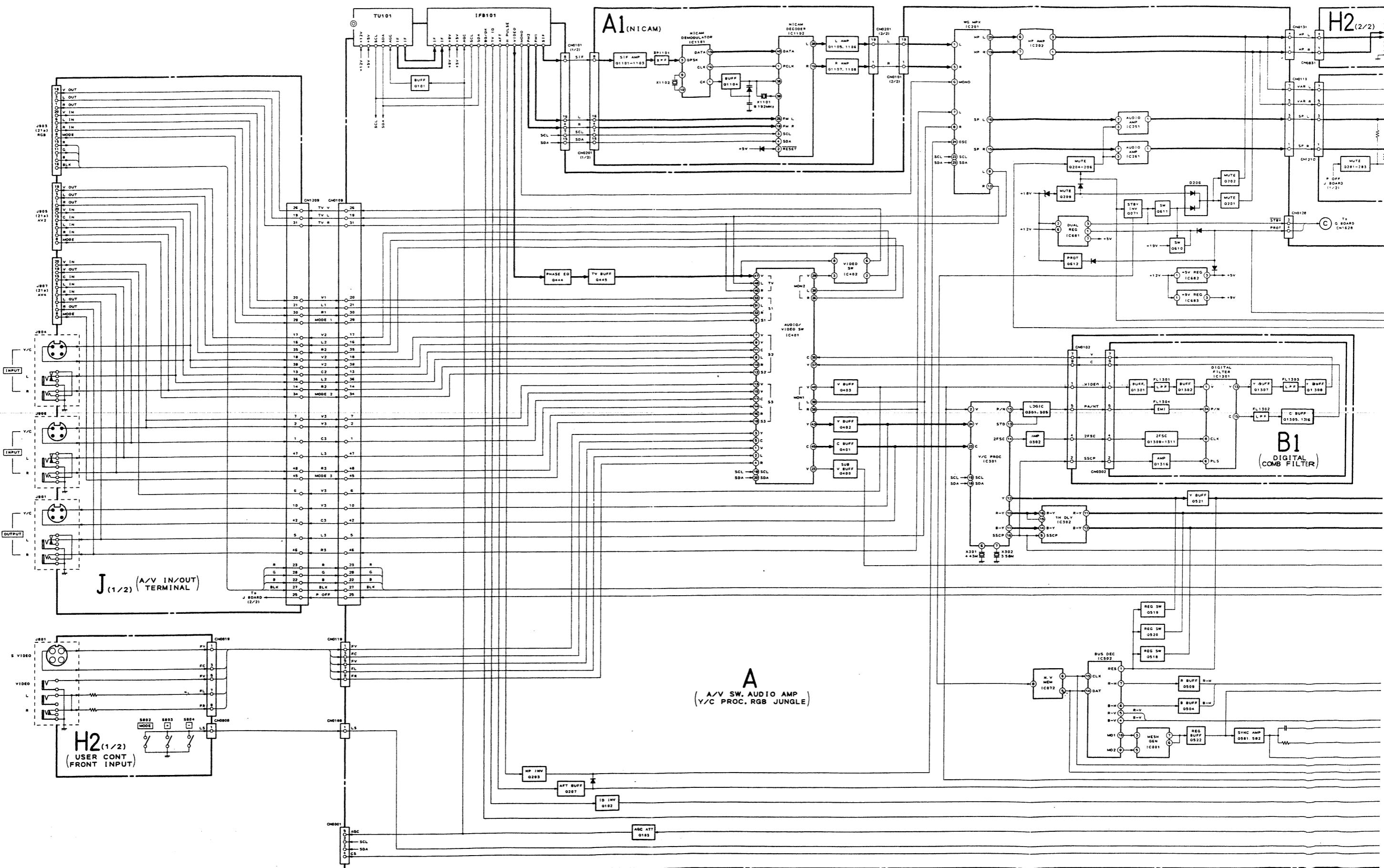
In case of no acknowledge bit, LED A and LED B starts blinking as shown.



SECTION 5 DIAGRAMS

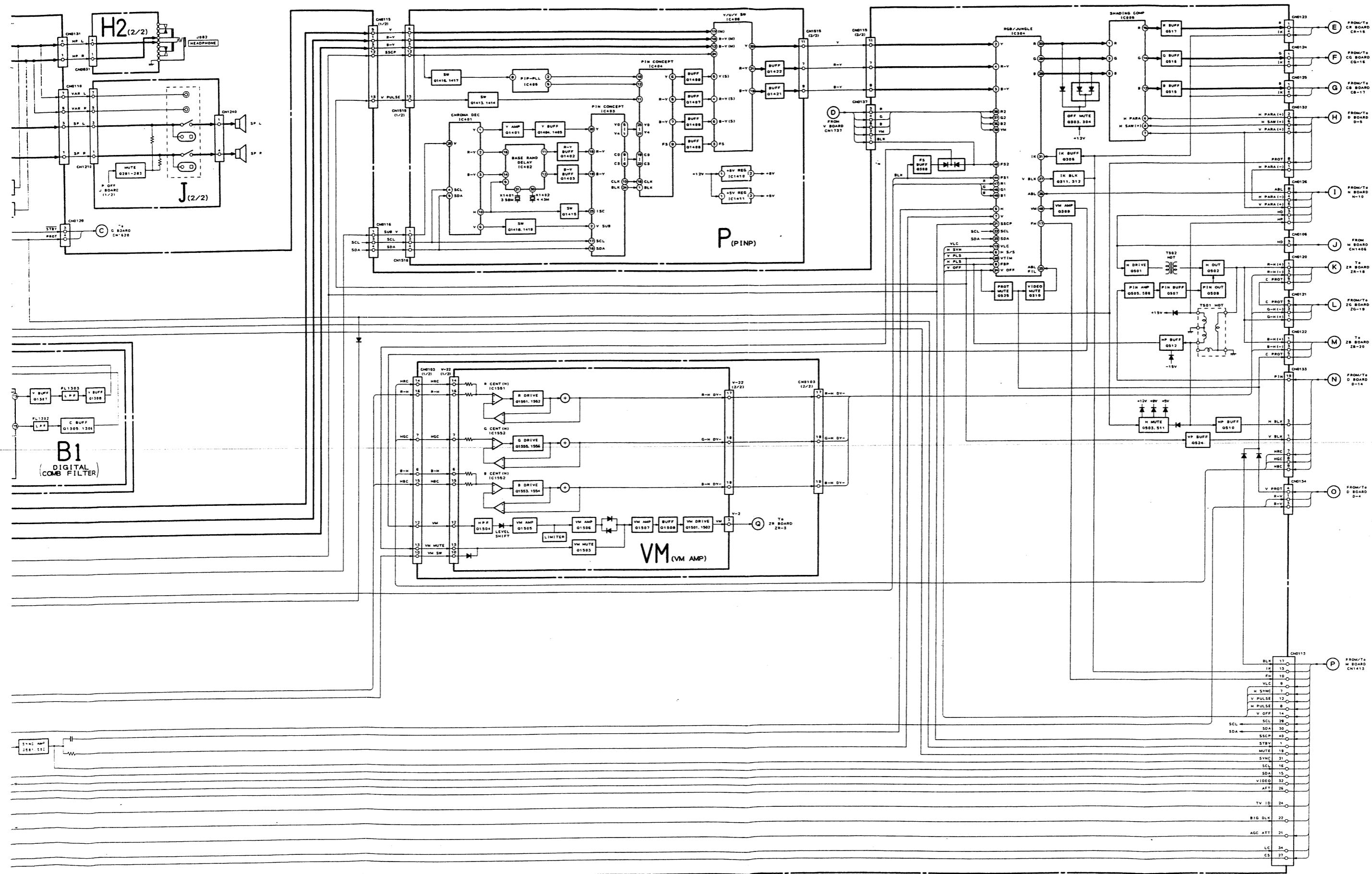
5-1. BLOCK DIAGRAMS

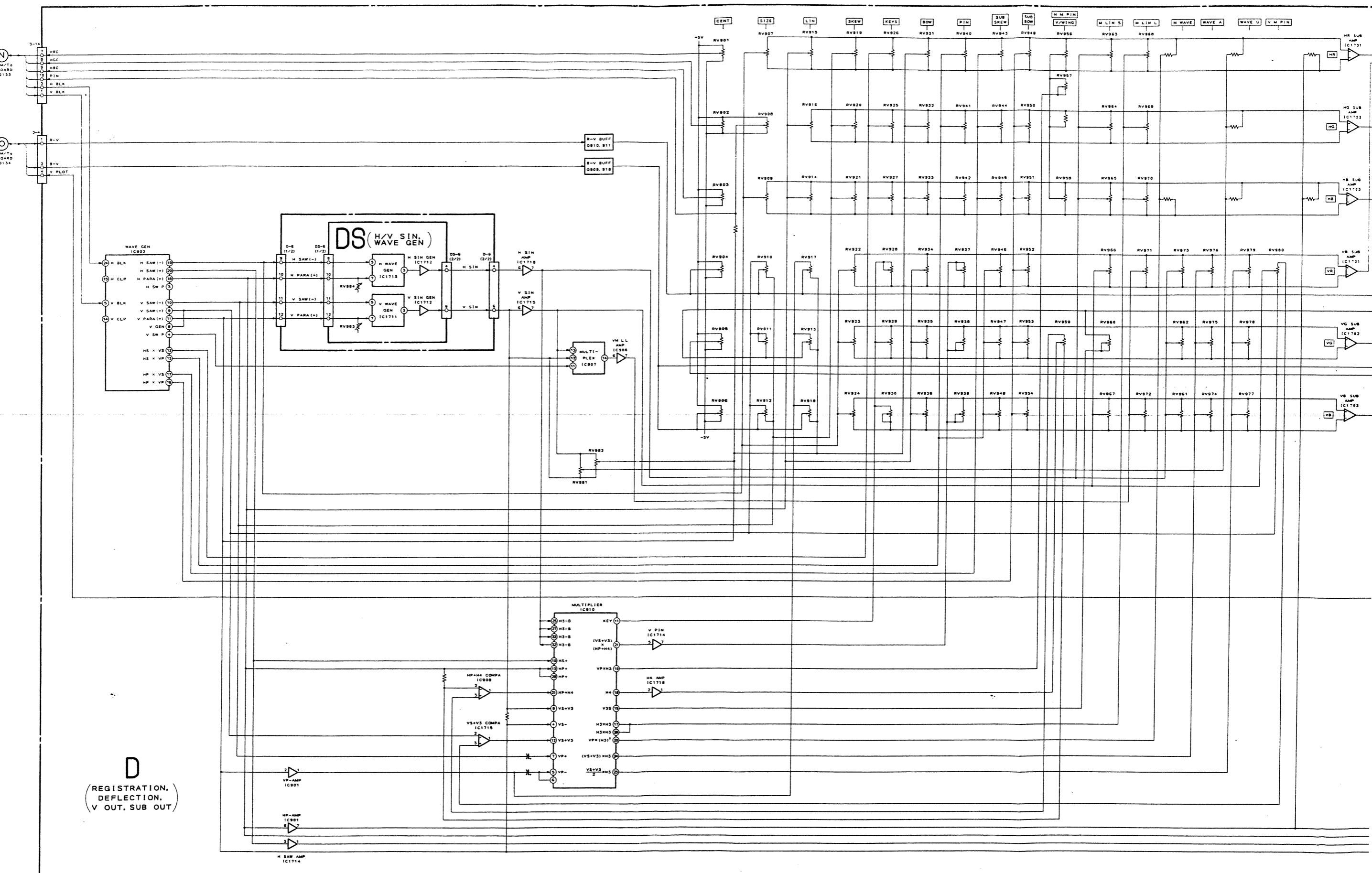


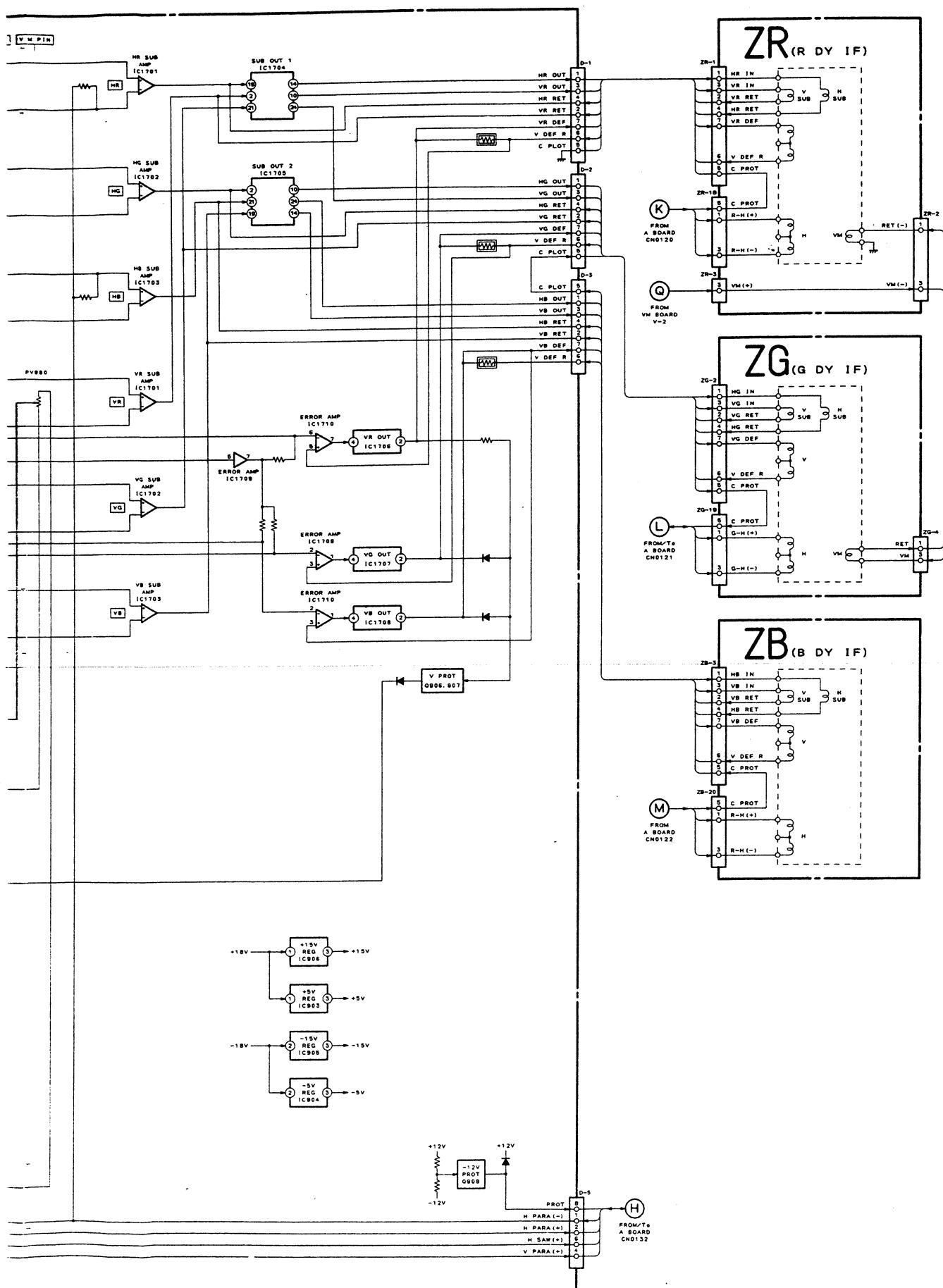


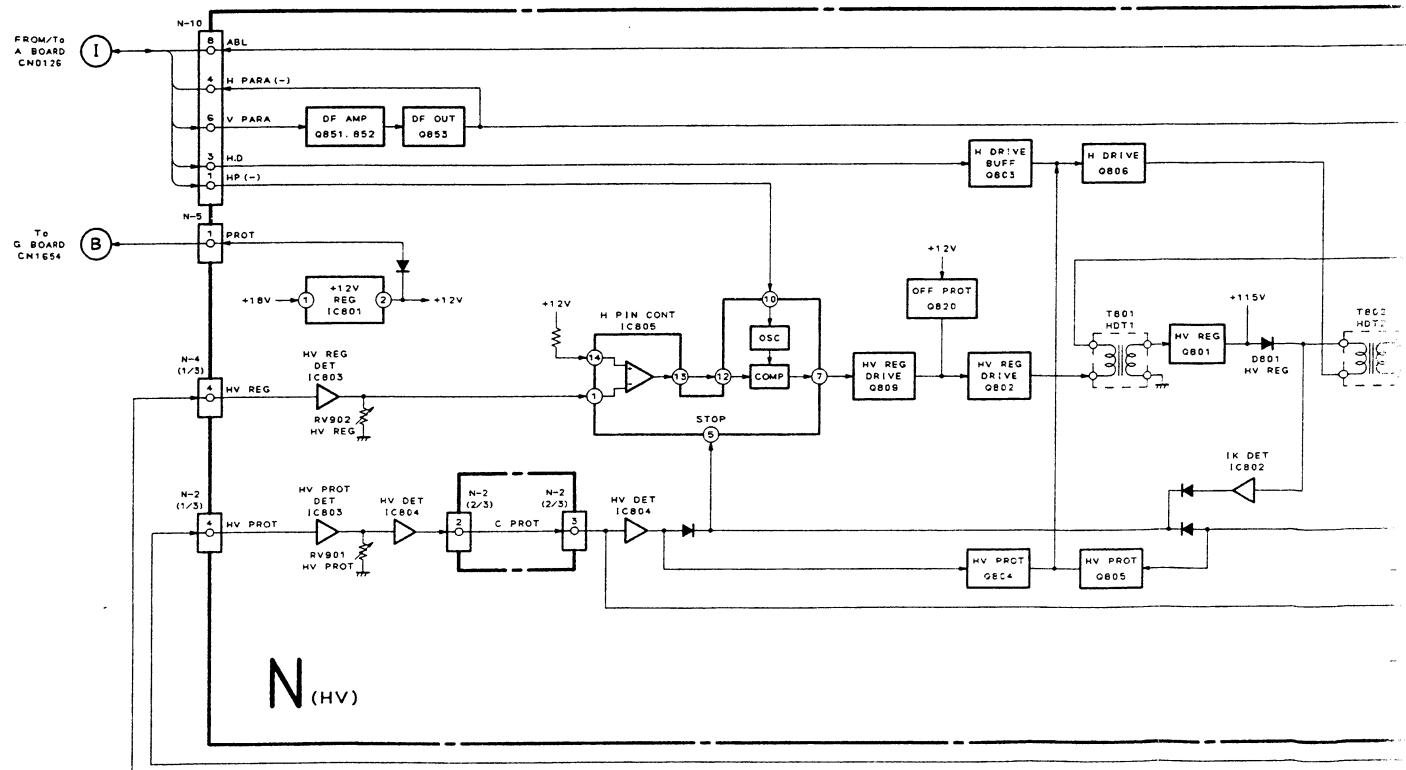
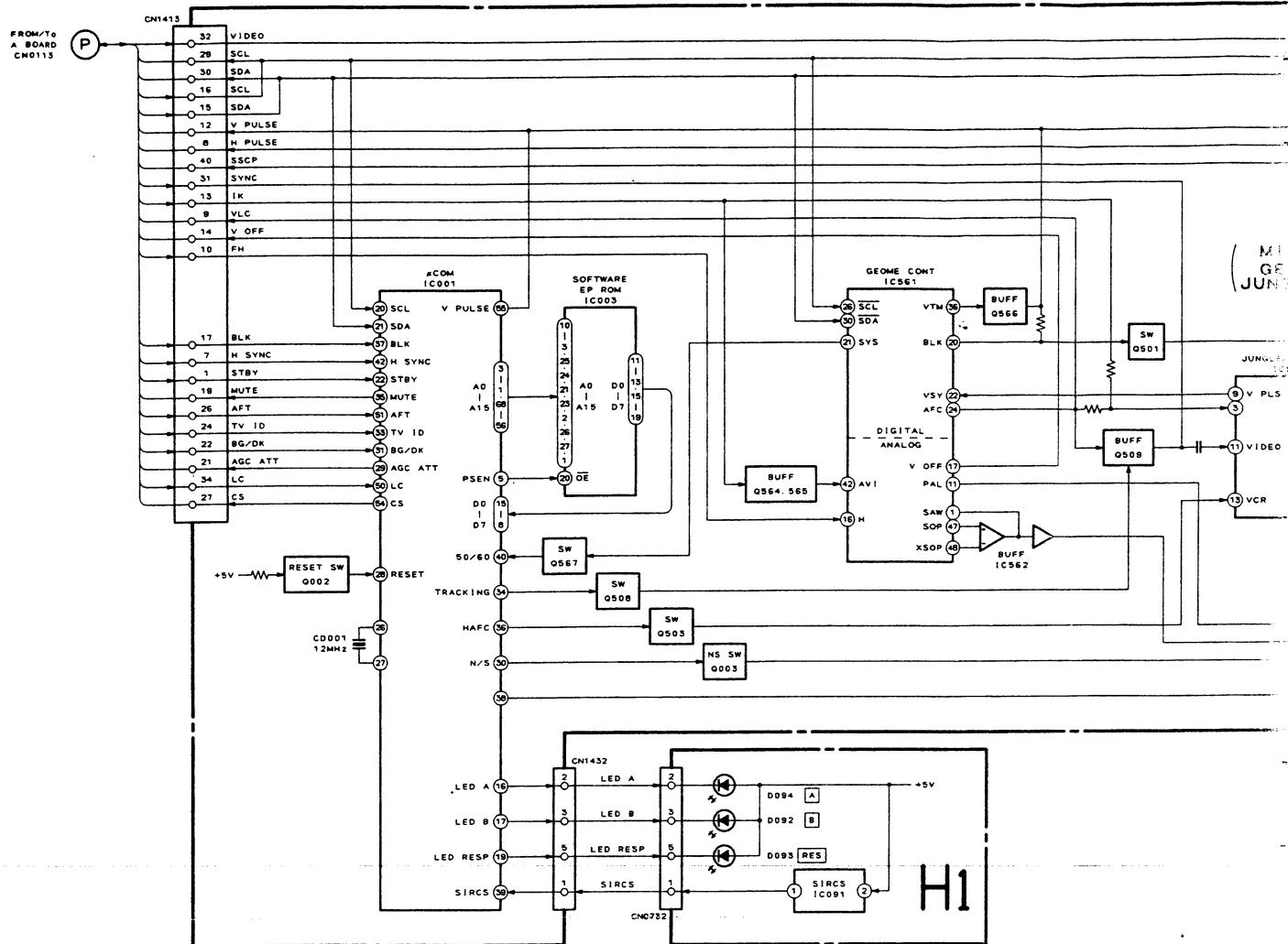
KP-S4613
RM-832

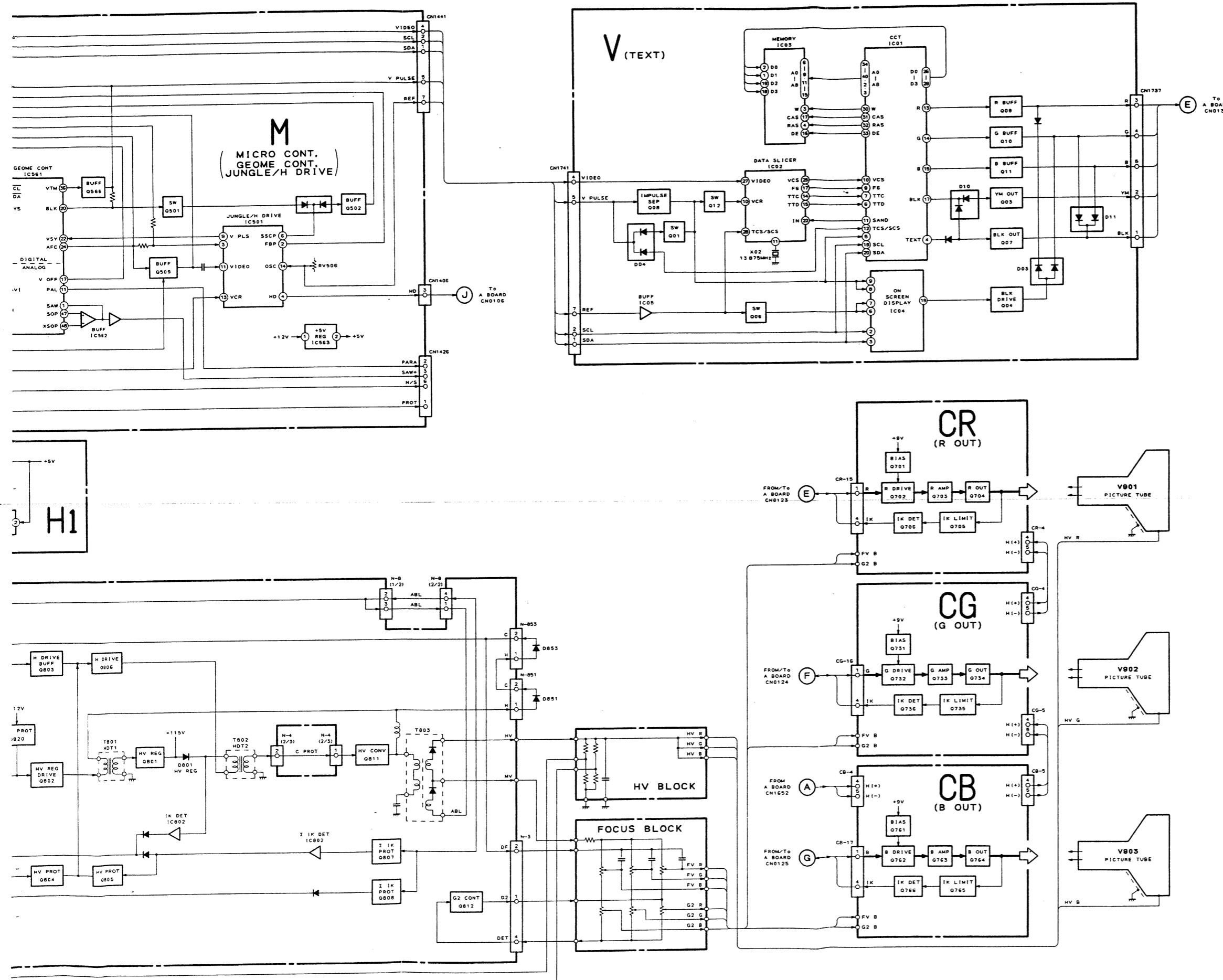
KP-S4613
RM-832



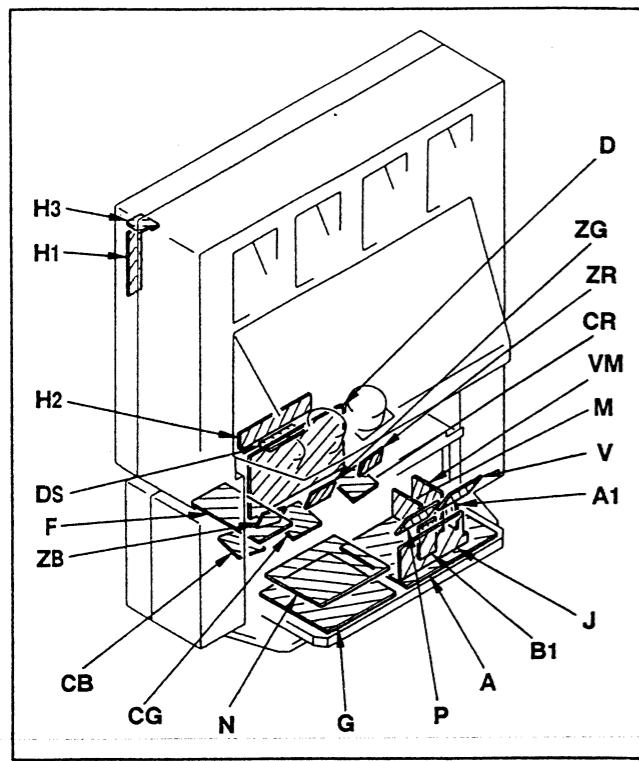








5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$
50 WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
 $\text{k}\Omega = 1000 \Omega$, $\text{M}\Omega = 1000\text{K}\Omega$
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power $1/4 \text{ W}$

- : nonflammable resistor.
- : internal component.
- : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Readings are taken with a color-bar signal input.
no mark : PAL
() : SECAM
< > : NTSC 3.58
() : NTSC 4.43
- Readings are taken with a $10\text{M}\Omega$ digital multimeter.
- Voltage are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- * : Can not be measured.
- Circled numbers are waveform references.
- : B+ bus.
- : B- bus.
- : signal path.

Reference information

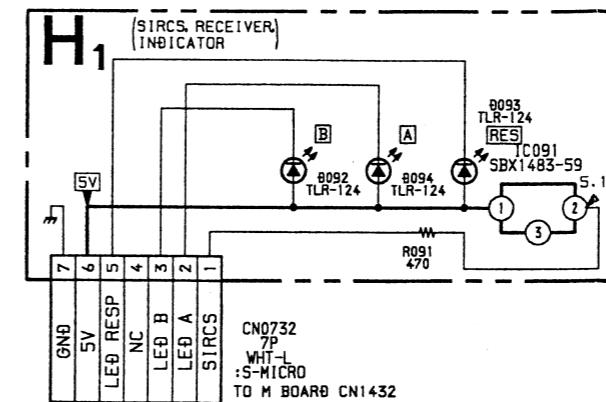
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: *	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

(1) Schematic Diagrams of H1, H2, H3 and F Boards

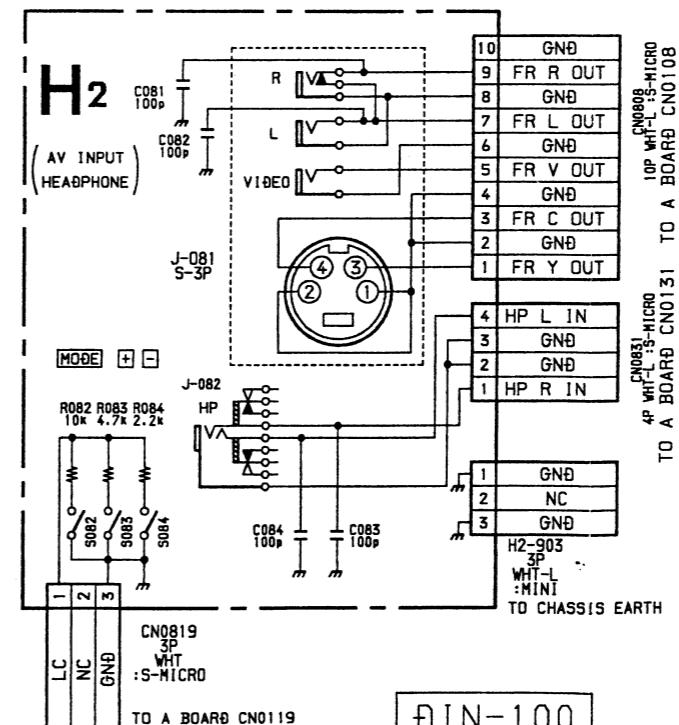
1 2 3 4 5 6 7 8

A



B-SS342.<ET.>-H1.

E



DIN-100

B-SS342.<ET.>-H2.

I

J

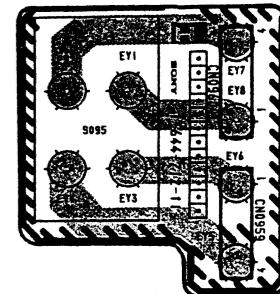
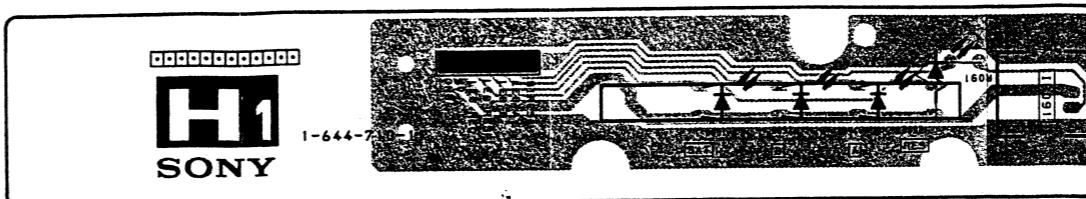
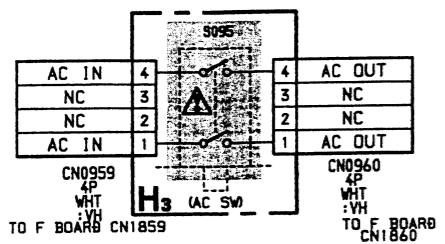
9 | 10 | 11 | 12 | 13 | 14 | 15

H1 [SIRCS, RECEIVER,
INDICATOR]

H2 [AV INPUT
HEADPHONE]

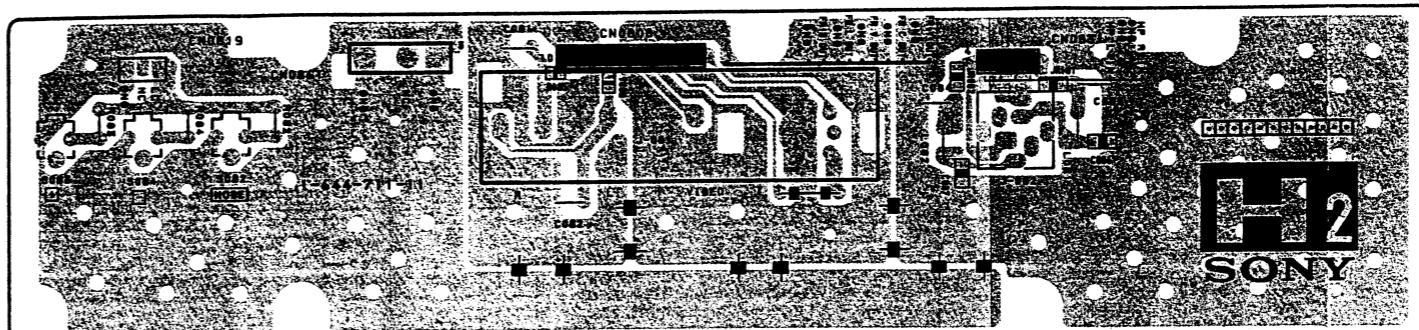
H₃ [AC SW] F [AC IN]

- H1 Board -

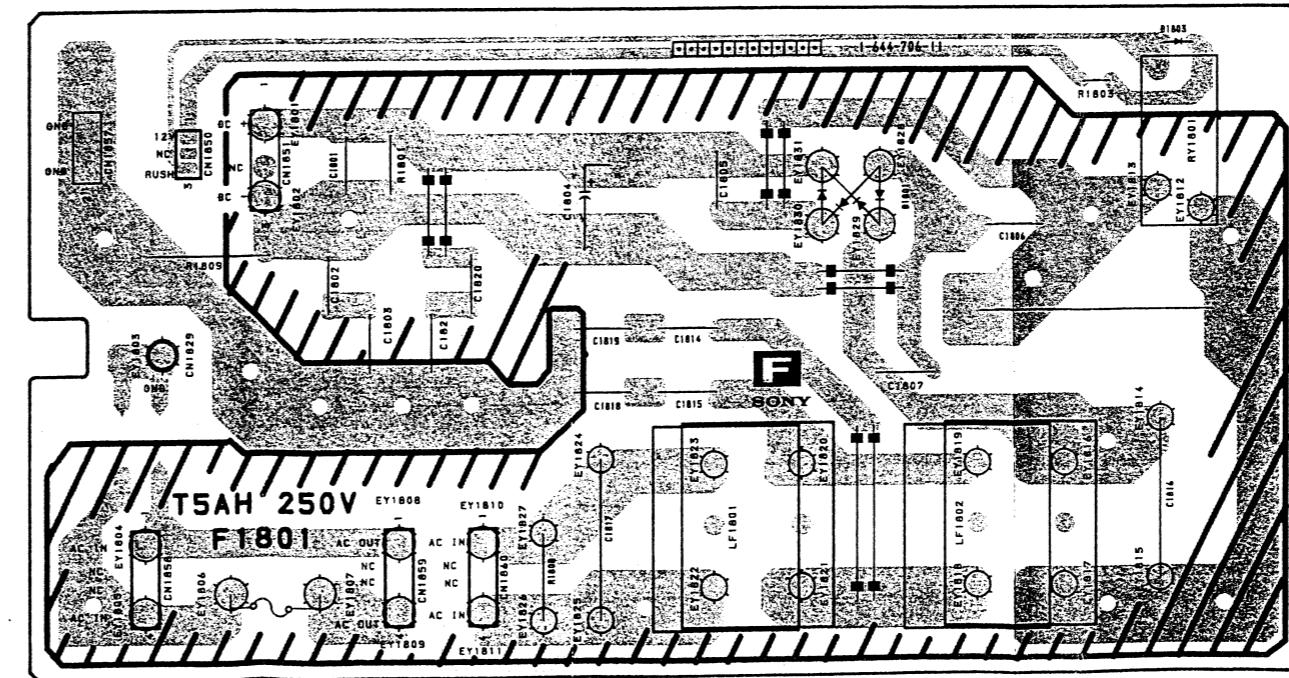
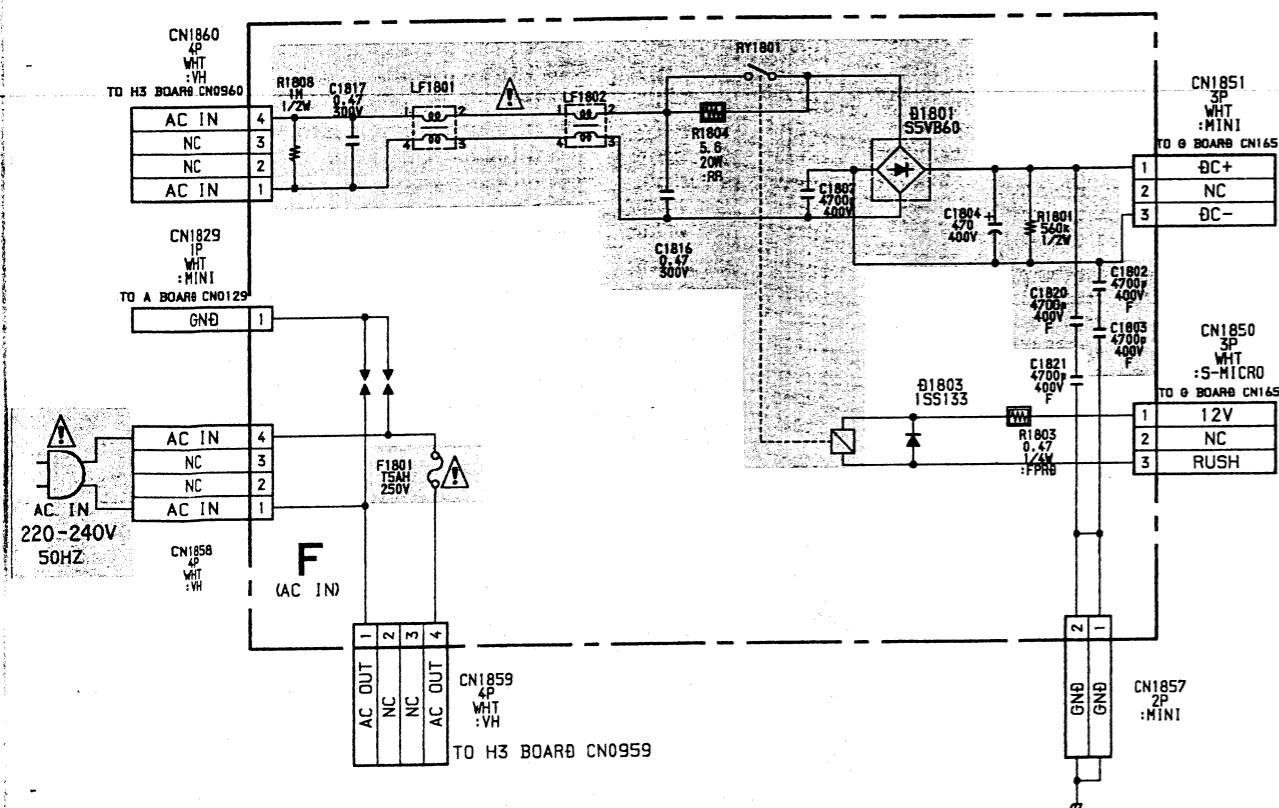


- H3 Board -

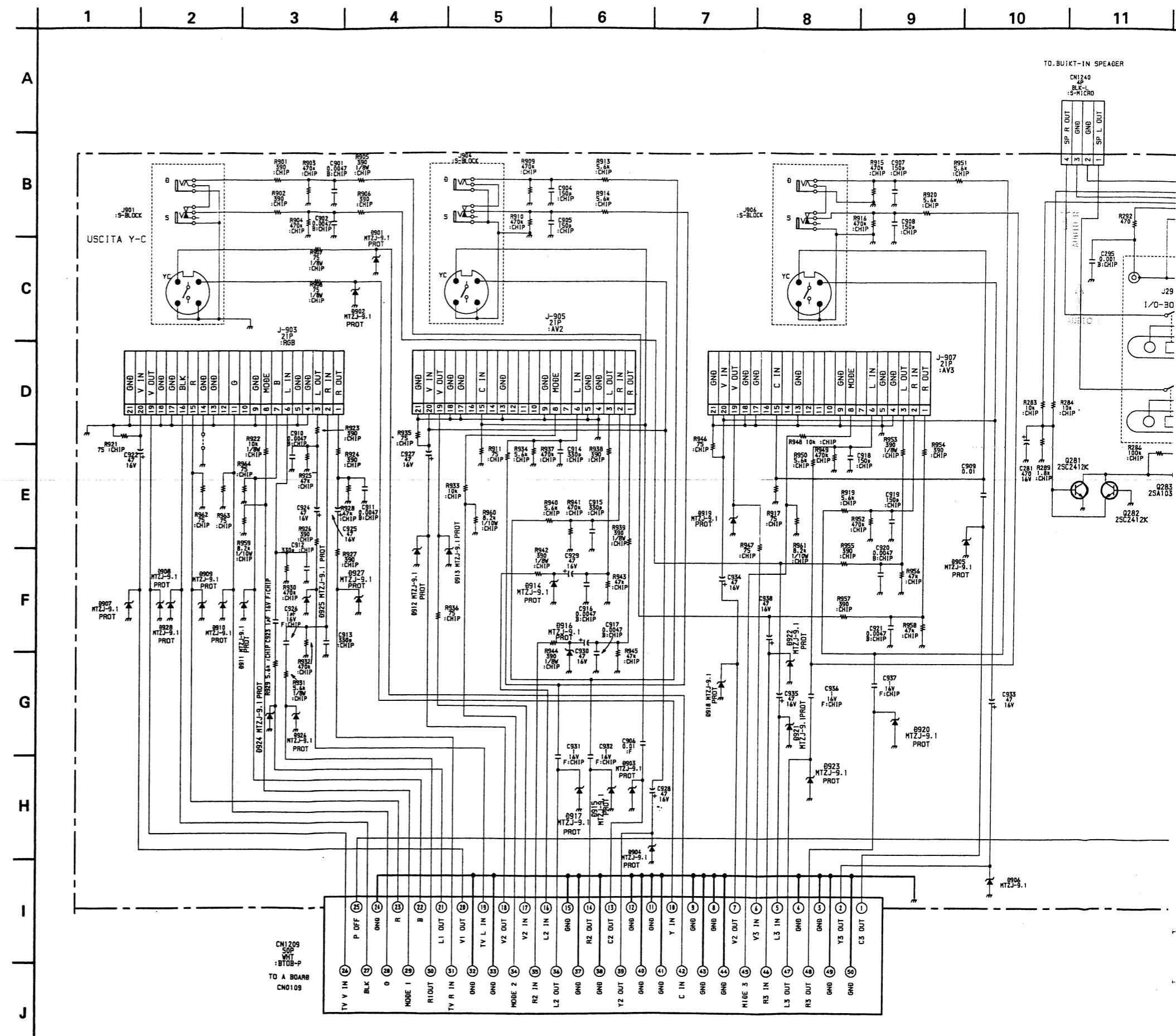
- H2 Board -



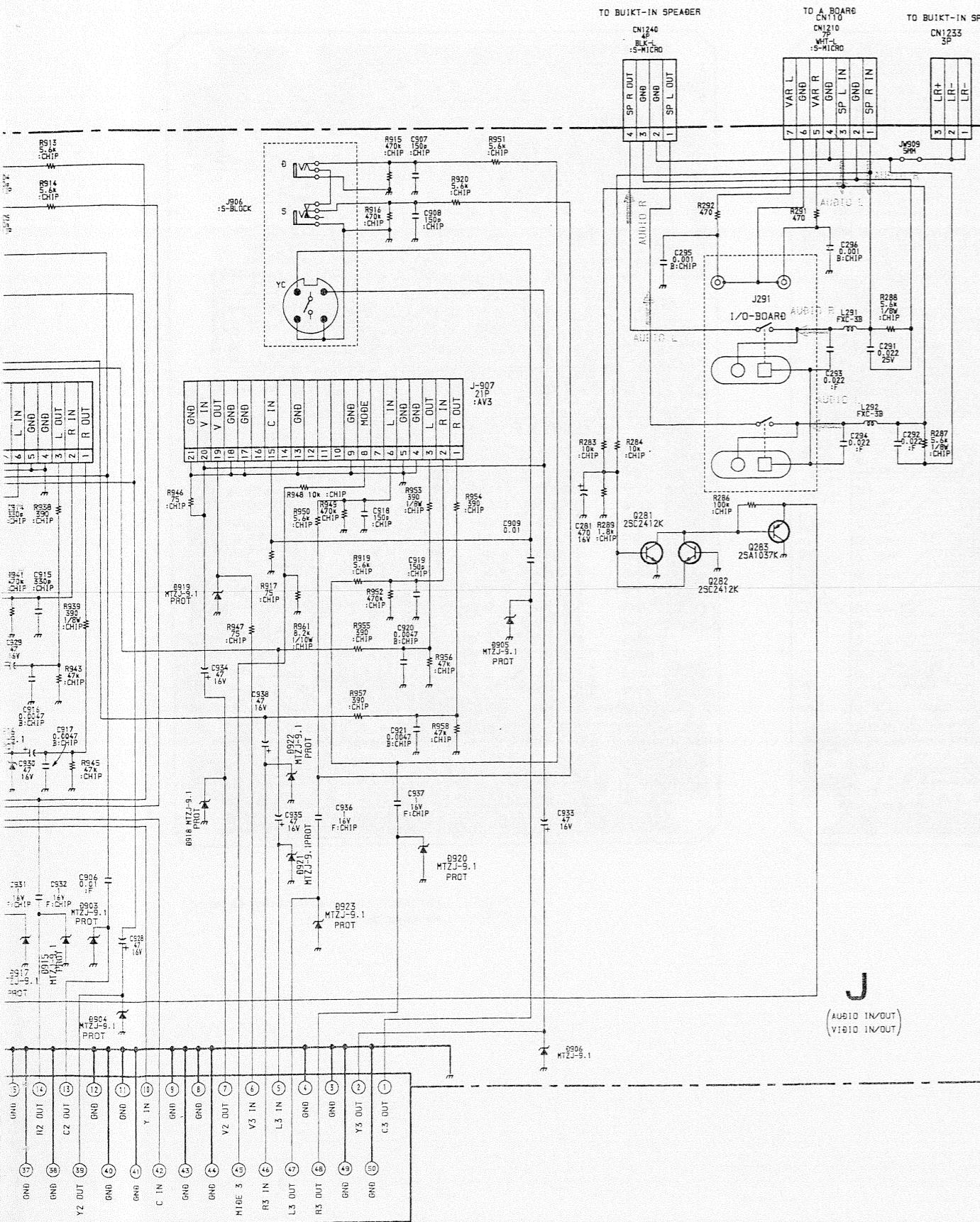
- F Board -



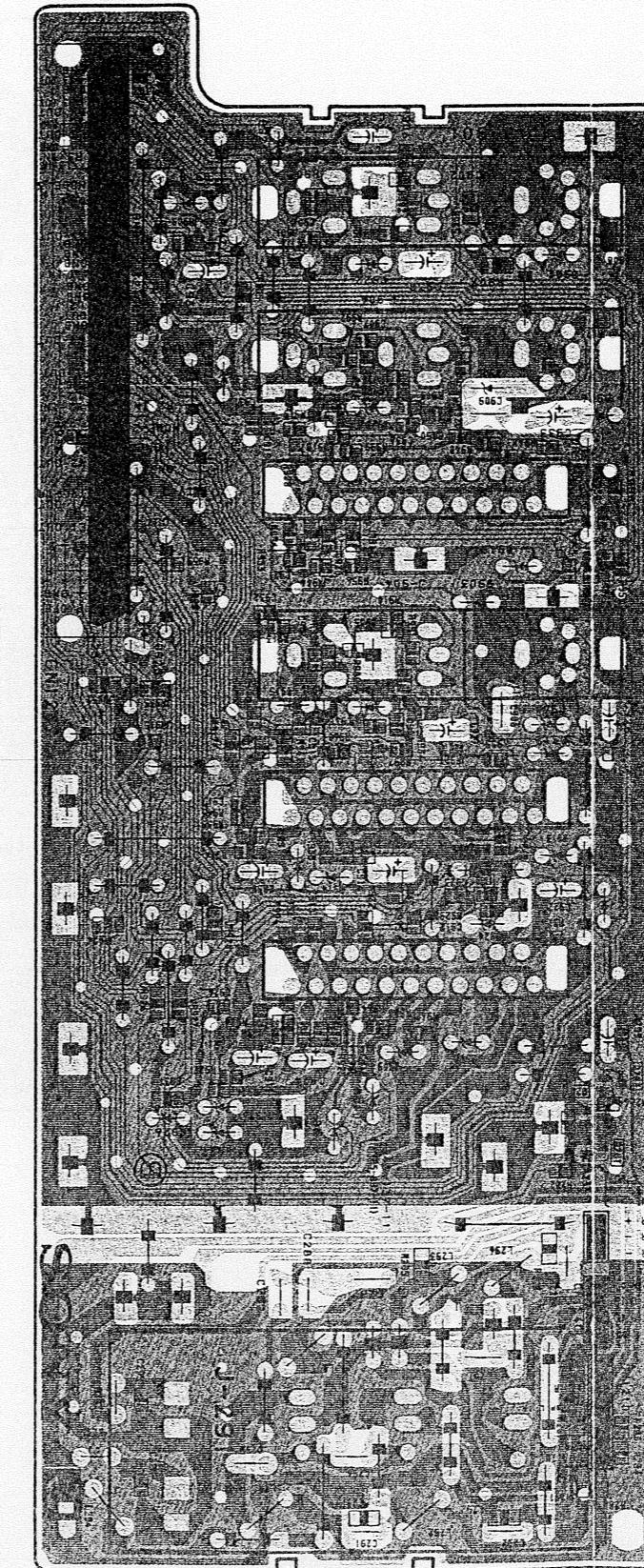
(2) Schematic Diagram of J Board



6 | 7 | 8 | 9 | 10 | 11 | 12 | 13



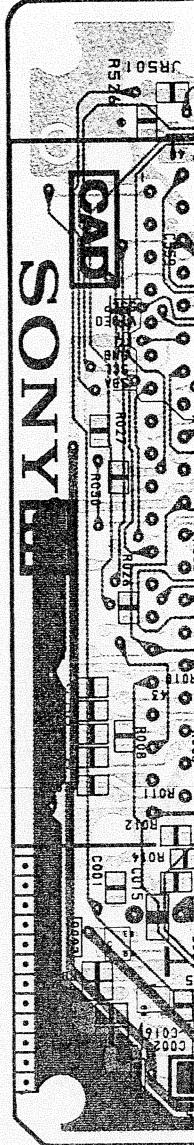
– J Board



- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

Pattern from the side which enables seeing.
Pattern of the rear side.

- M Board (Conc)



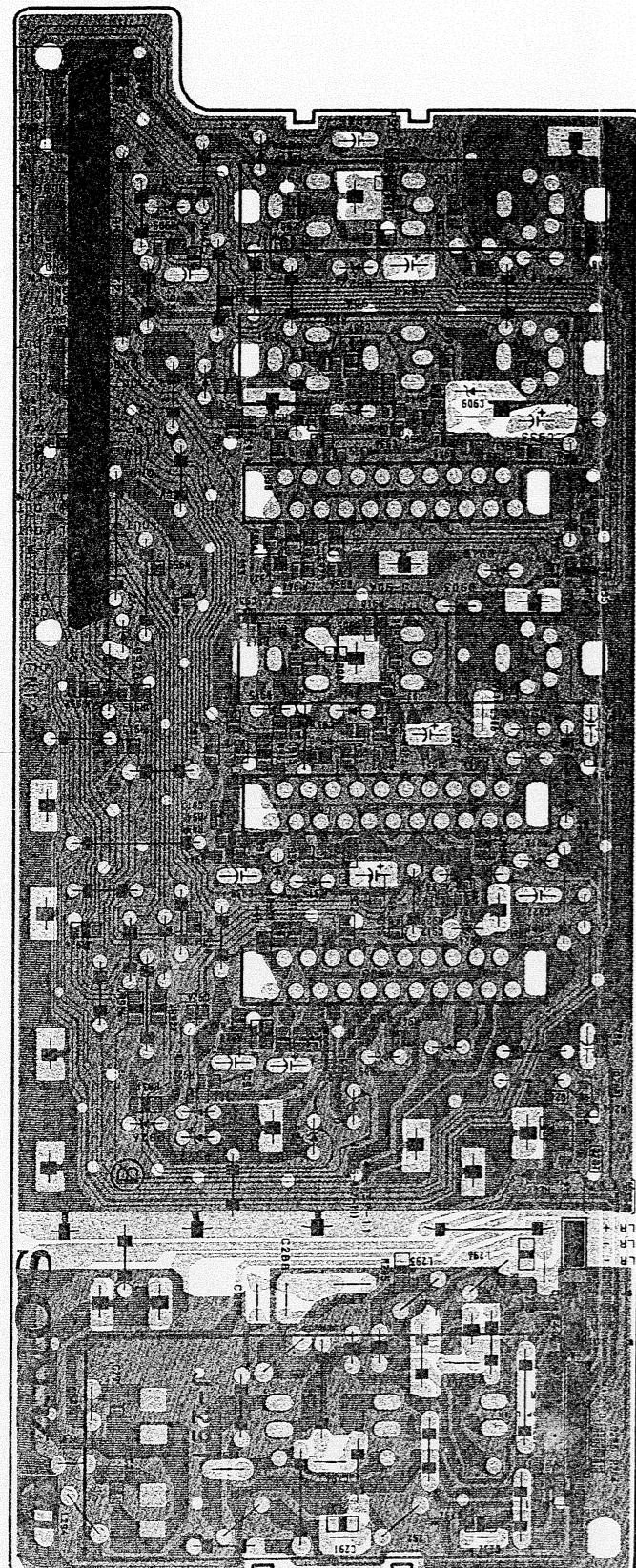
KP-S4613
RM-832

KP-S4613
RM-832

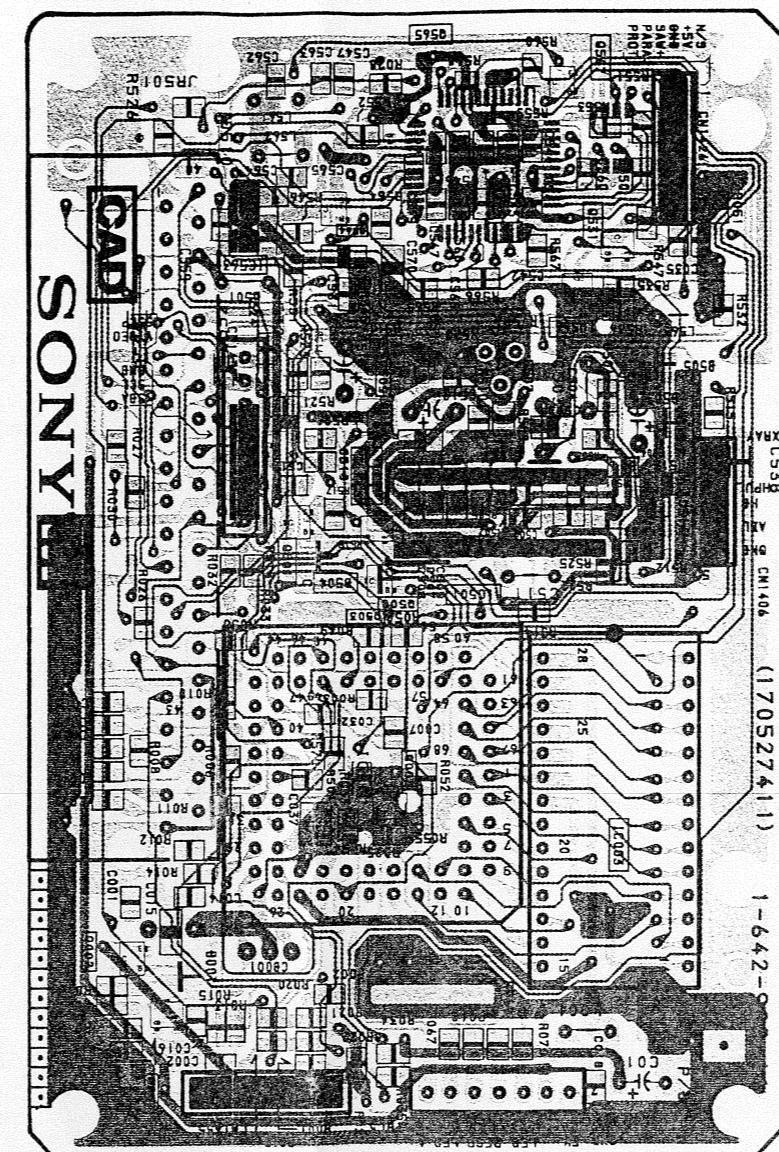
J [AUDIO IN/OUT]
[VIDEO IN/OUT]

M [MICRO CONTROLLER,
GEOMETRIC CONTROLLER,
JUNGLE, H-DRIVE]

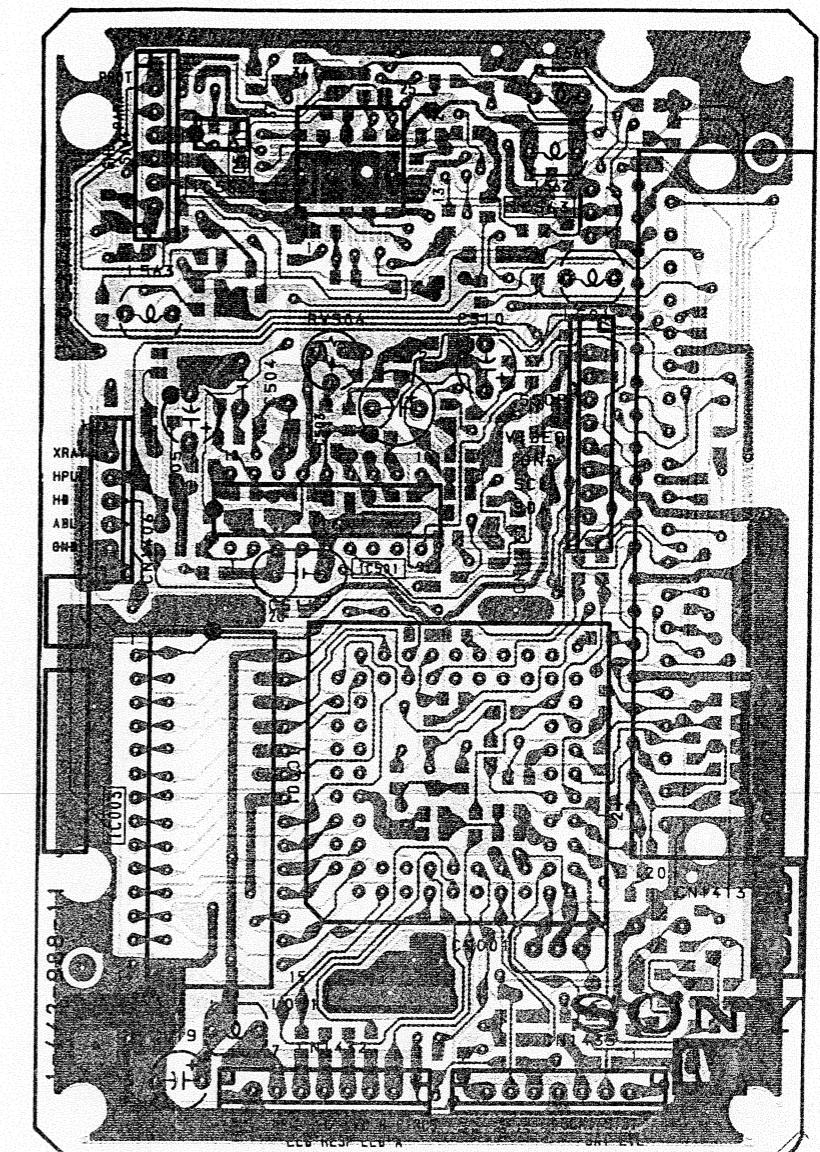
- J Board -



- M Board (Conductor Side) -



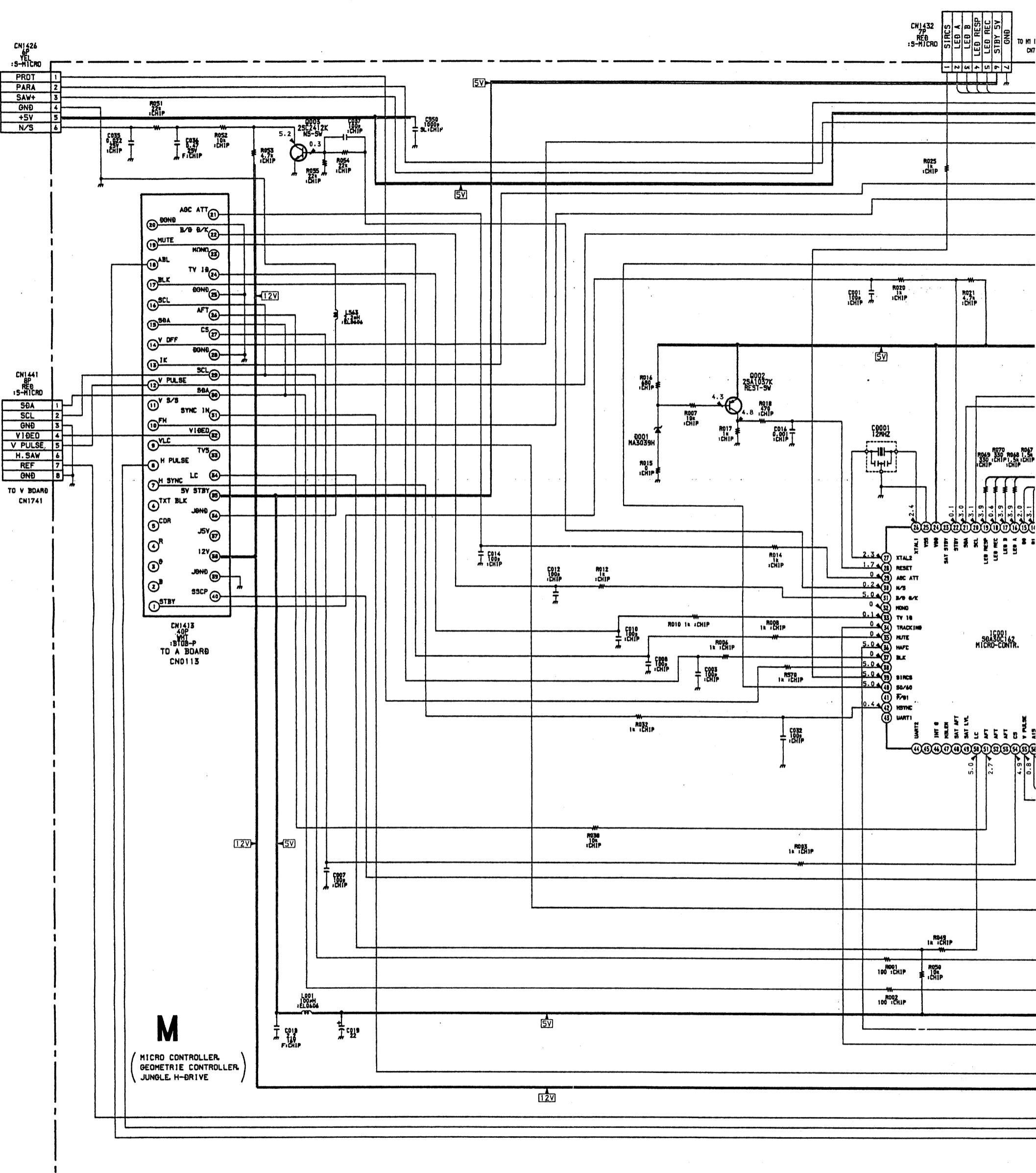
- M Board (Component Side) -

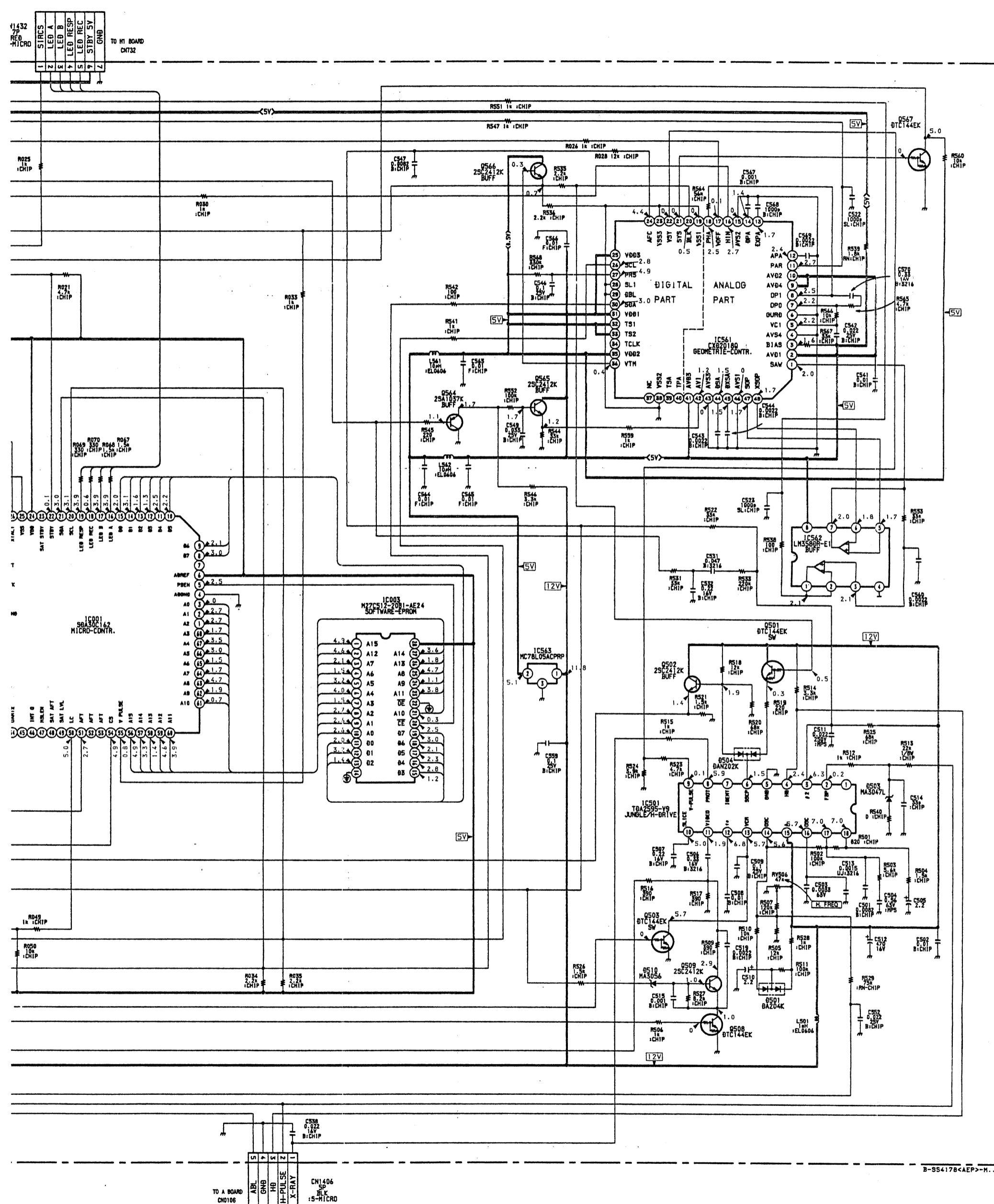


- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

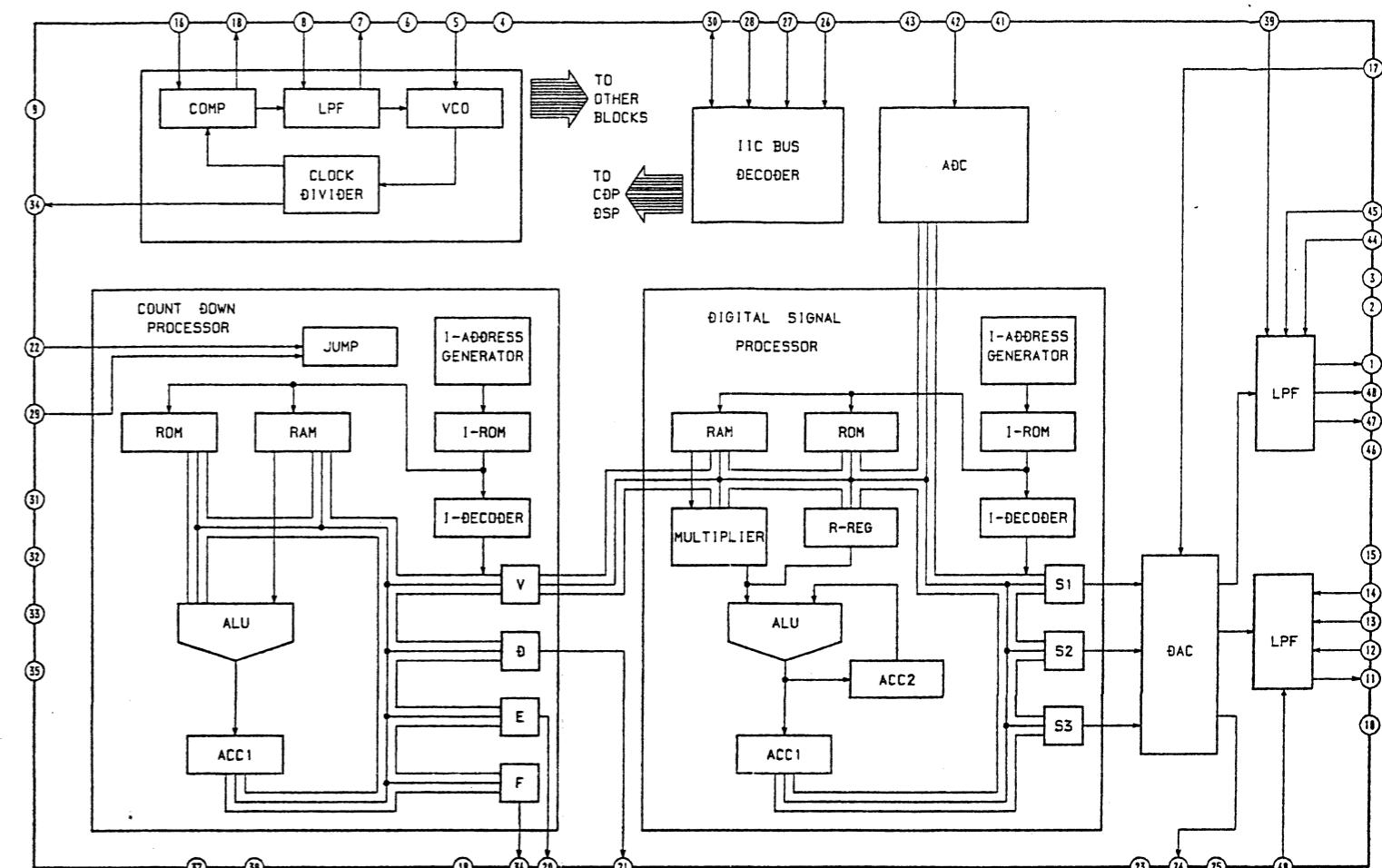
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

(3) Schematic Diagram of M Board





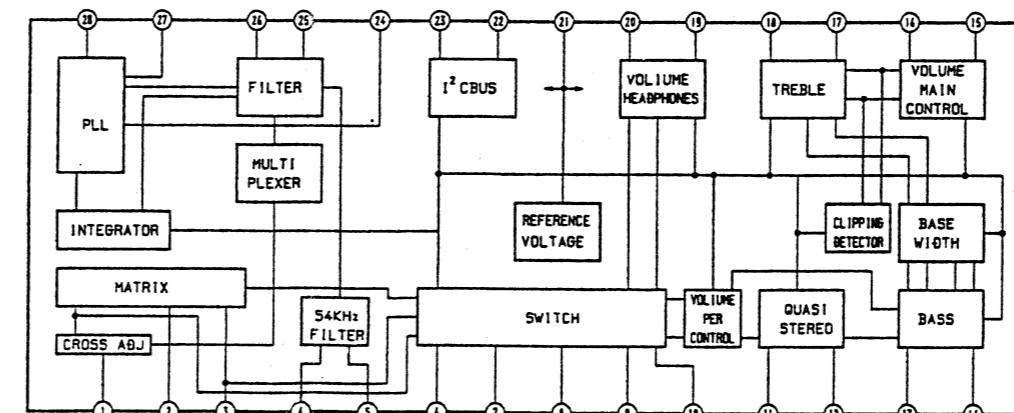
M Board IC561 CXD2018Q



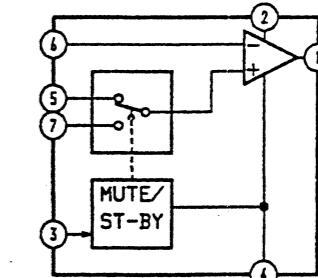
- 64 -

- 65 -

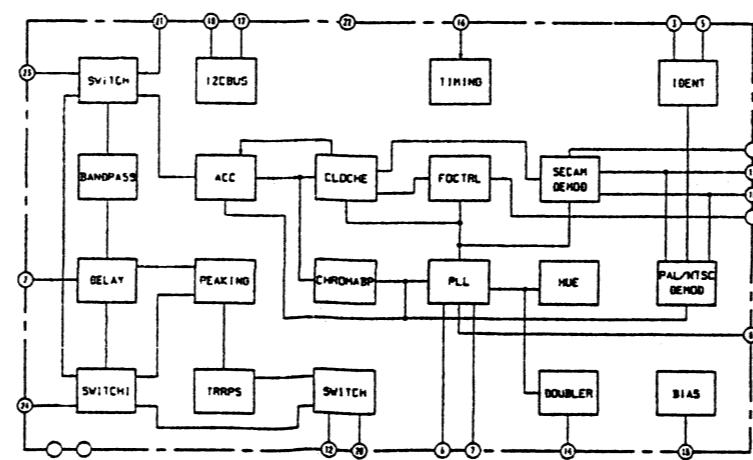
A Board IC201 TDA6612



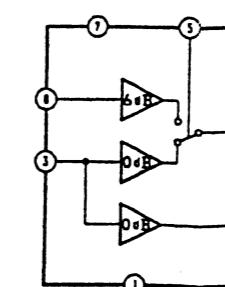
A Board IC251/261 TDA2052



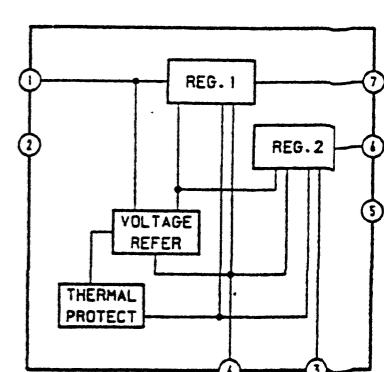
A Board IC301 TDA9145



A Board IC402 TEA2114

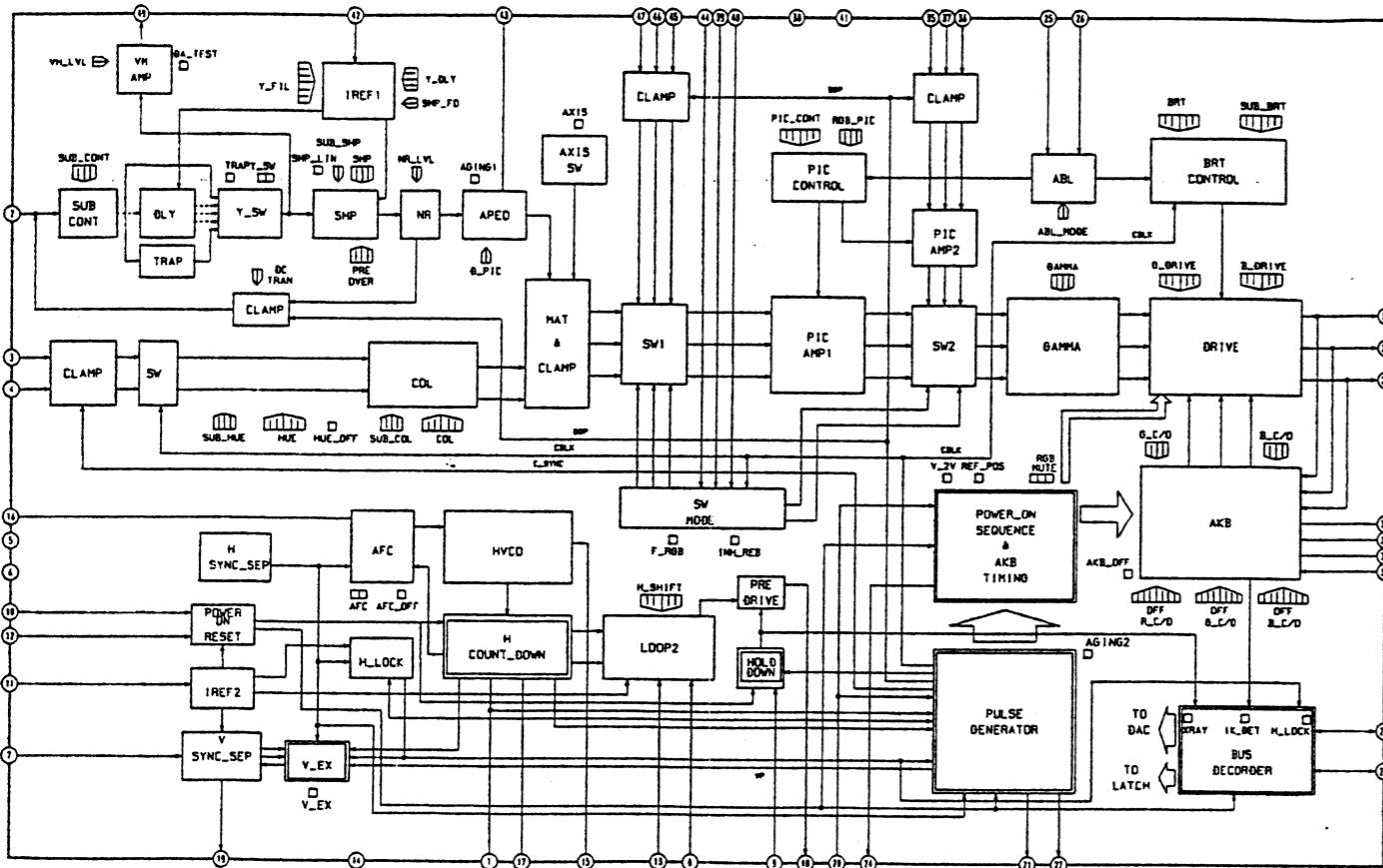


A Board IC681 TDA8138A

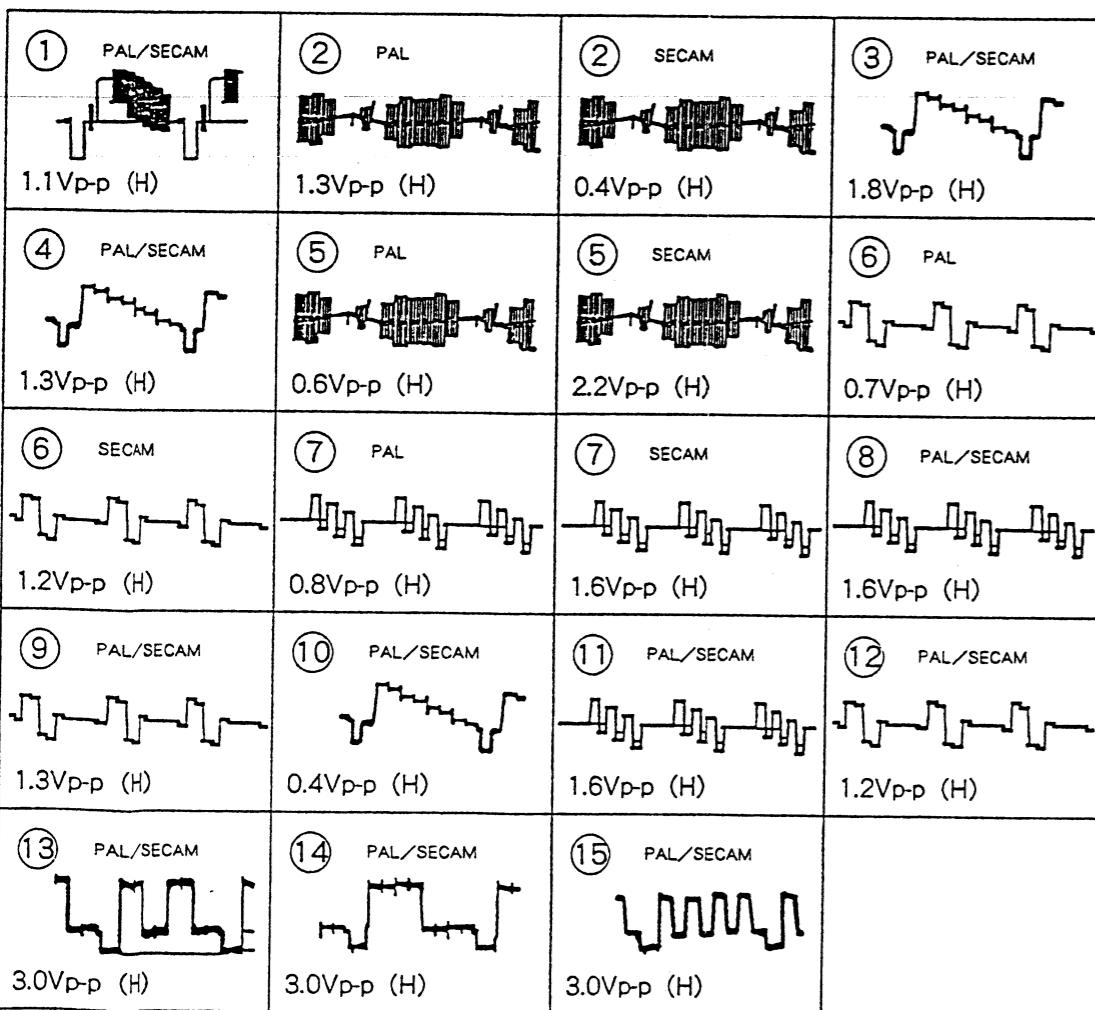


66A

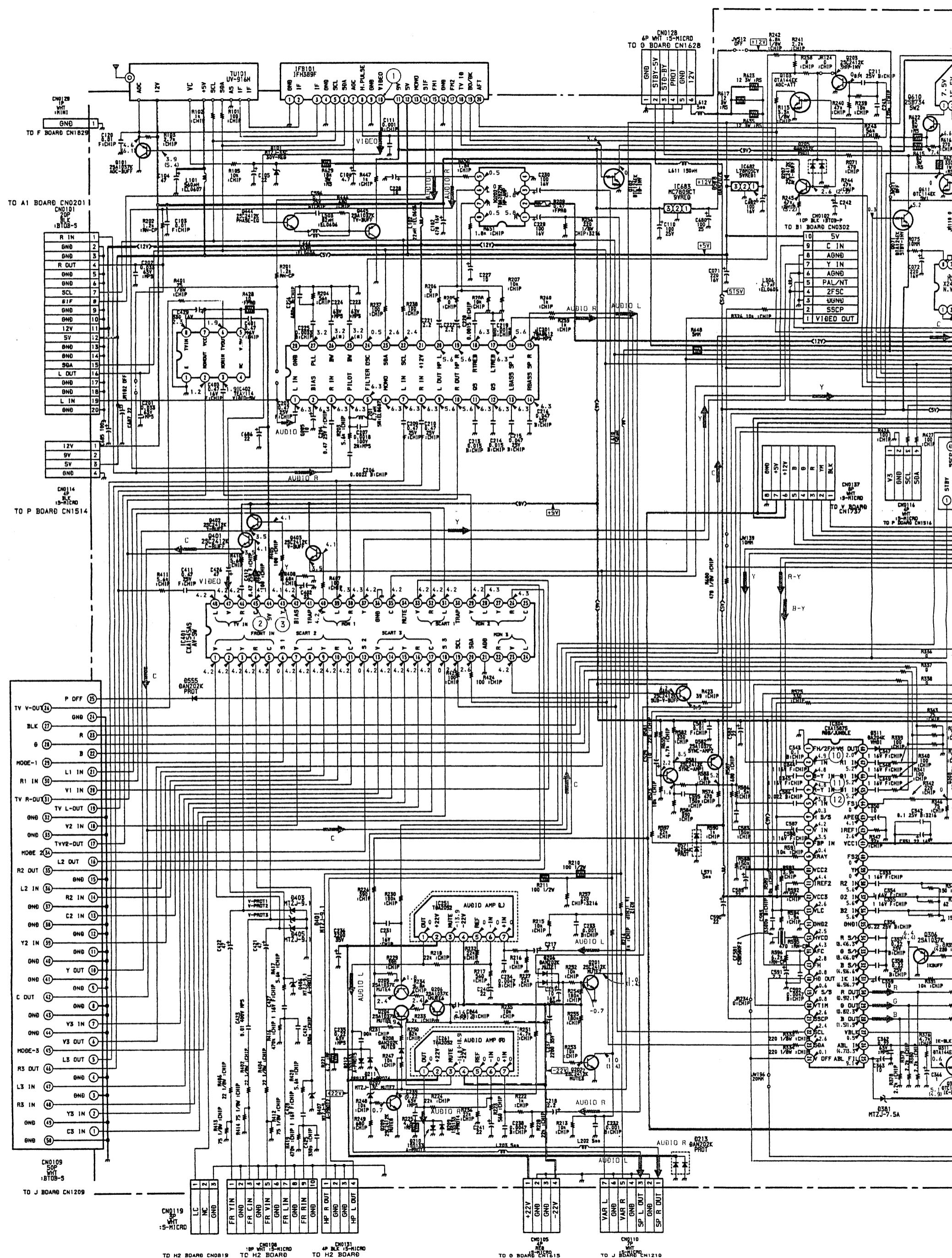
A Board IC304 CXA1587S

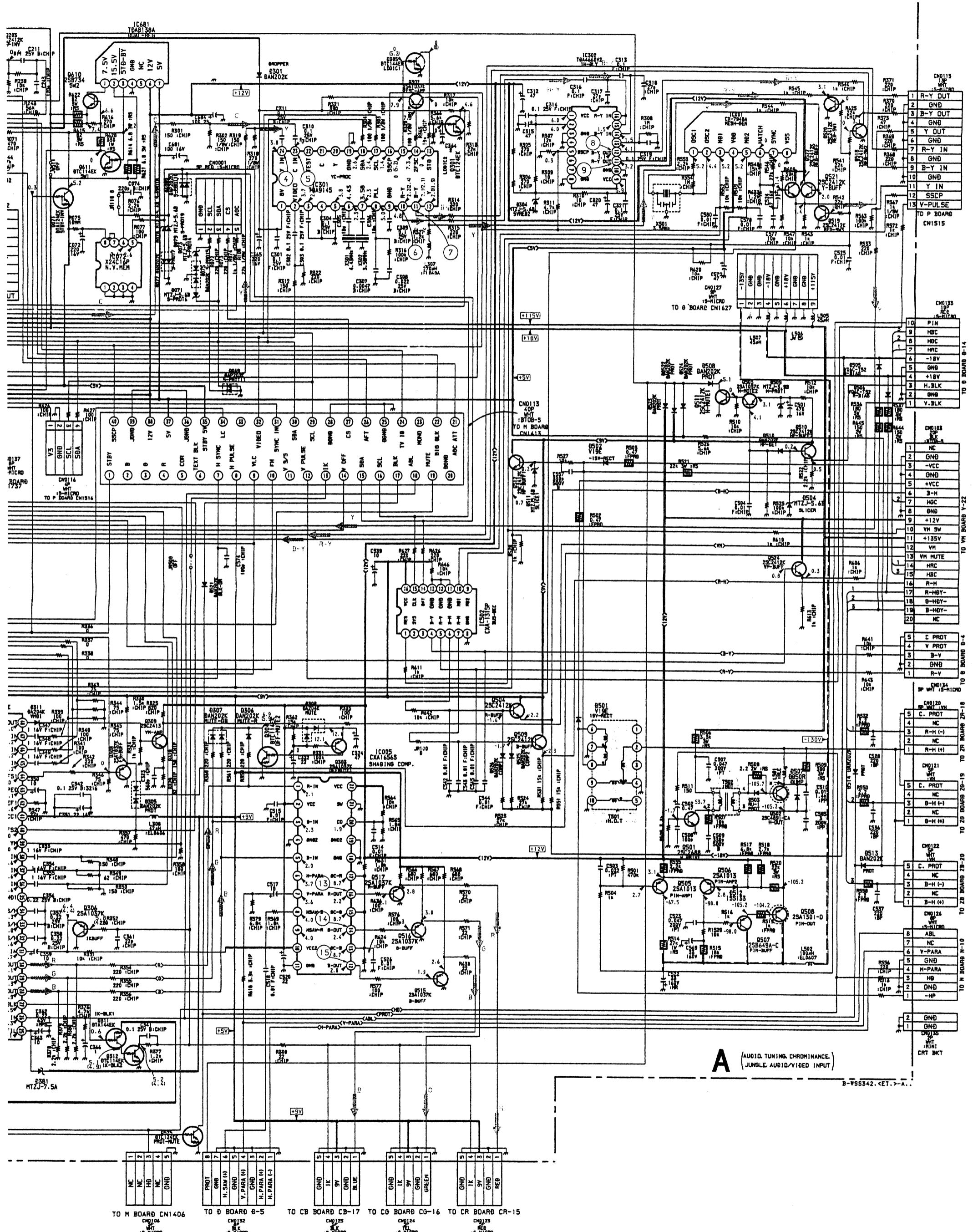


A BOARD WAVEFORMS



(4) Schematic Diagram of A Board



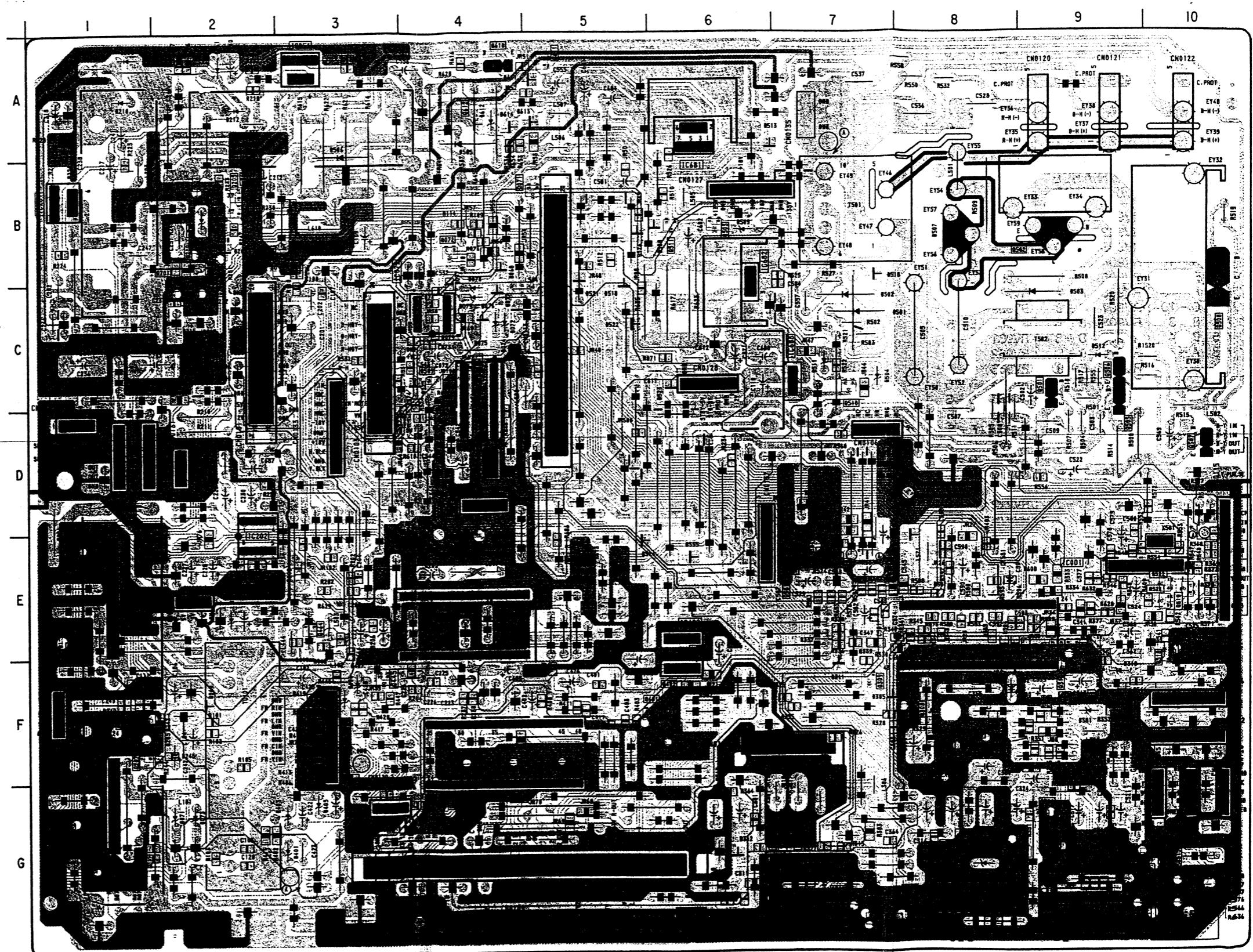


A [AUDIO, TUNING, CHROMINANCE,
JUNGLE, AUDIO/VIDEO INPUT]

A Board

IC		Q402	F - 6	D207	B - 2
IC001	E - 10	Q403	F - 6	D208	B - 2
IC005	G - 9	Q404	G - 4	D209	A - 1
IC072	C - 4	Q444	E - 3	D210	A - 1
IC201	E - 4	Q445	F - 3	D211	A - 2
IC202	E - 2	Q501	C - 9	D212	A - 2
IC251	A - 3	Q502	B - 9	D213	C - 1
IC261	B - 1	Q503	B - 6	D301	G - 6
IC301	G - 7	Q504	D - 4	D304	G - 8
IC302	G - 8	Q505	C - 9	D305	F - 7
IC304	E - 8	Q506	C - 9	D306	G - 9
IC401	F - 4	Q507	D - 10	D307	G - 9
IC402	E - 6	Q508	C - 10	D308	G - 9
IC502	D - 4	Q509	C - 4	D311	E - 7
IC681	A - 6	Q510	C - 7	D381	F - 9
IC682	B - 6	Q511	B - 6	D401	G - 3
IC683	C - 7	Q512	C - 7	D403	G - 3
TRANSISTOR		Q515	G - 10	D405	G - 3
		Q516	G - 10	D406	F - 3
		Q517	G - 10	D407	F - 3
		Q518	F - 10	D501	C - 7
		Q519	E - 10	D502	C - 7
		Q520	F - 10	D503	C - 9
		Q521	E - 10	D504	C - 7
		Q522	E - 10	D505	A - 4
		Q524	E - 5	D506	A - 3
		Q525	E - 9	D507	B - 8
		Q581	E - 7	D508	B - 6
		Q582	D - 7	D509	B - 6
Q204	B - 2	Q610	A - 4	D510	B - 7
Q205	B - 2	Q611	A - 5	D511	C - 7
Q206	B - 2			D512	C - 9
Q207	F - 1			D513	A - 7
Q209	B - 2			D514	E - 5
Q301	G - 8	D068	B - 4	D518	C - 5
Q302	G - 7	D069	F - 2	D521	B - 5
Q303	G - 9	D071	G - 2	D522	C - 5
Q304	G - 9	D073	G - 2	D523	C - 6
Q305	G - 7	D075	G - 2	D524	B - 5
Q306	F - 9	D077	C - 4	D525	C - 4
Q308	F - 8	D078	C - 4	D526	D - 4
Q309	F - 7	D079	C - 4	D555	E - 6
Q311	E - 9	D101	E - 2	D571	E - 8
Q312	E - 9	D205	F - 2		
Q401	F - 6	D206	B - 2		

- A Board -

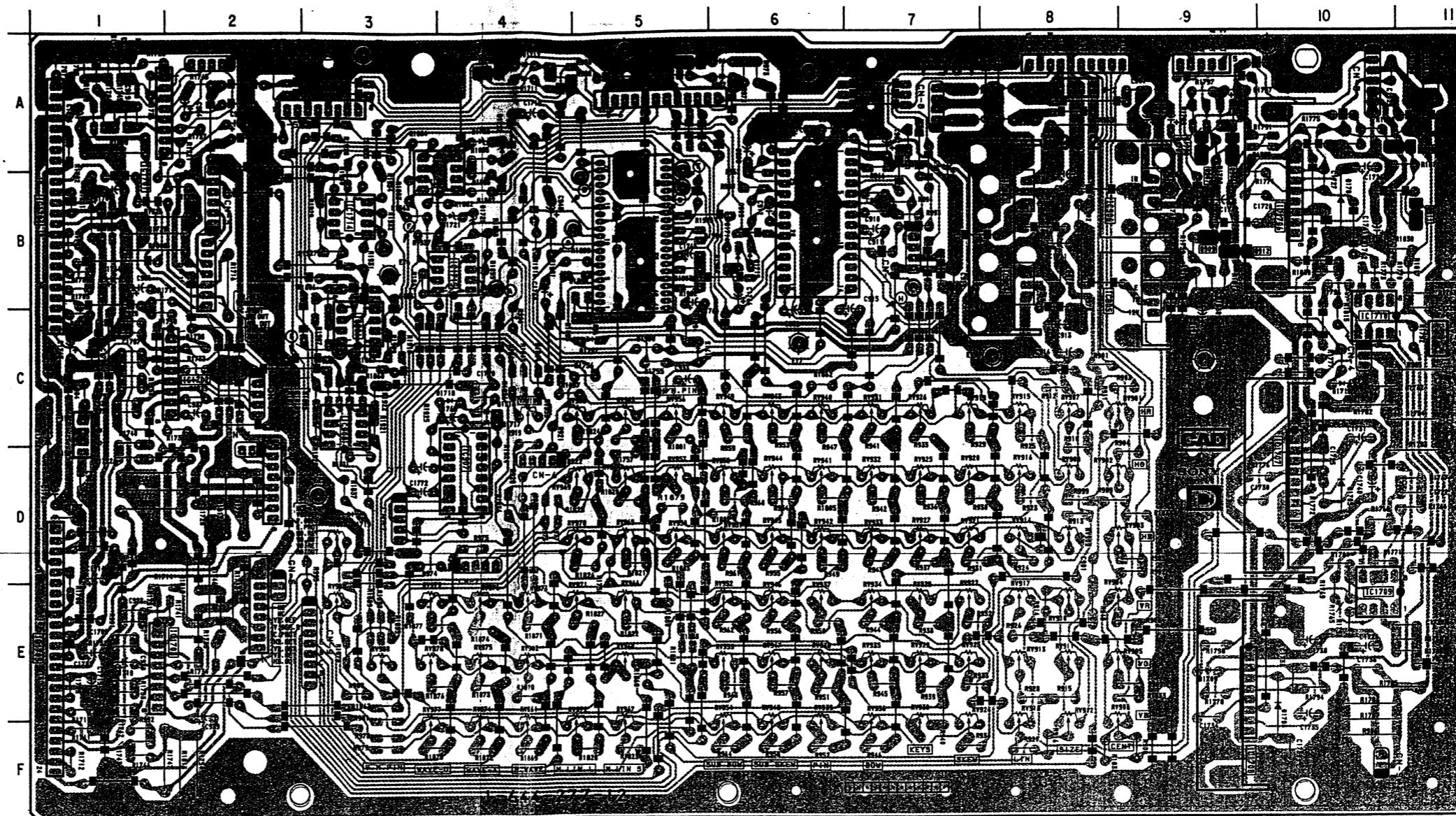


-  : Pattern from the side which enables seeing.
-  : Pattern of the rear side.

D [REGISTRATION
DEFLECTION
V-OUT, SUB-OUT]

D Board

IC	TRANSISTOR	
IC901 C - 3	Q902 A - 5	RV938 E - 6
IC902 B - 6	Q906 A - 9	RV939 F - 6
IC903 B - 8	Q907 A - 9	RV940 C - 6
IC904 B - 8	Q908 A - 4	RV941 D - 6
IC905 B - 9	Q909 B - 9	RV942 D - 6
IC906 B - 9	Q910 A - 11	RV943 C - 6
IC907 D - 4	Q911 B - 11	RV944 D - 6
IC908 C - 3	Q912 B - 9	RV945 D - 6
IC910 B - 5		RV946 E - 6
IC1701 A - 1		RV947 E - 6
IC1702 C - 2		RV948 F - 6
IC1703 E - 1		RV949 C - 6
IC1704 B - 1		RV950 D - 6
IC1705 E - 1		RV951 D - 6
IC1706 B - 10		RV901 C - 9
IC1707 D - 10		RV952 E - 6
IC1708 E - 9		RV902 D - 9
IC1709 E - 10		RV953 E - 6
IC1710 C - 10		RV903 D - 9
IC1714 B - 3		RV954 F - 6
IC1715 B - 4		RV904 E - 9
IC1718 A - 4		RV955 C - 5
		RV905 E - 9
		RV956 D - 5
		RV906 F - 9
		RV957 D - 5
		RV907 C - 8
		RV958 D - 5
		RV908 D - 8
		RV959 C - 4
		RV909 D - 8
		RV960 E - 5
		RV910 E - 8
		RV961 F - 4
		RV911 E - 8
		RV962 E - 4
		RV912 F - 8
		RV963 C - 5
		RV913 E - 8
		RV964 D - 5
		RV914 D - 8
		RV965 D - 5
		RV915 C - 8
		RV966 E - 5
		RV916 D - 8
		RV967 F - 5
		RV917 E - 8
		RV968 C - 5
		RV918 F - 8
		RV969 D - 5
		RV919 C - 7
		RV970 D - 5
		RV920 D - 7
		RV971 E - 5
		RV921 D - 7
		RV972 F - 5
		RV922 F - 7
		RV973 E - 4
		RV923 F - 7
		RV974 F - 4
		RV924 F - 7
		RV975 E - 4
		RV925 D - 7
		RV976 E - 4
		RV926 C - 7
		RV977 F - 3
		RV927 D - 7
		RV978 E - 3
		RV928 E - 7
		RV979 E - 3
		RV929 E - 7
		RV980 E - 3
		RV930 F - 7
		RV981 E - 3
		RV931 C - 7
		RV982 D - 3
		RV932 D - 7
		RV933 D - 7
		RV934 E - 7
		RV935 E - 7
		RV936 F - 7
		RV937 E - 6

- D Board -

(5) Schematic Diagram of D Board

1 2 3 4 5 6 7 8 9 10 11 12

A

B

C

D

E

F

G

H

I

J

K

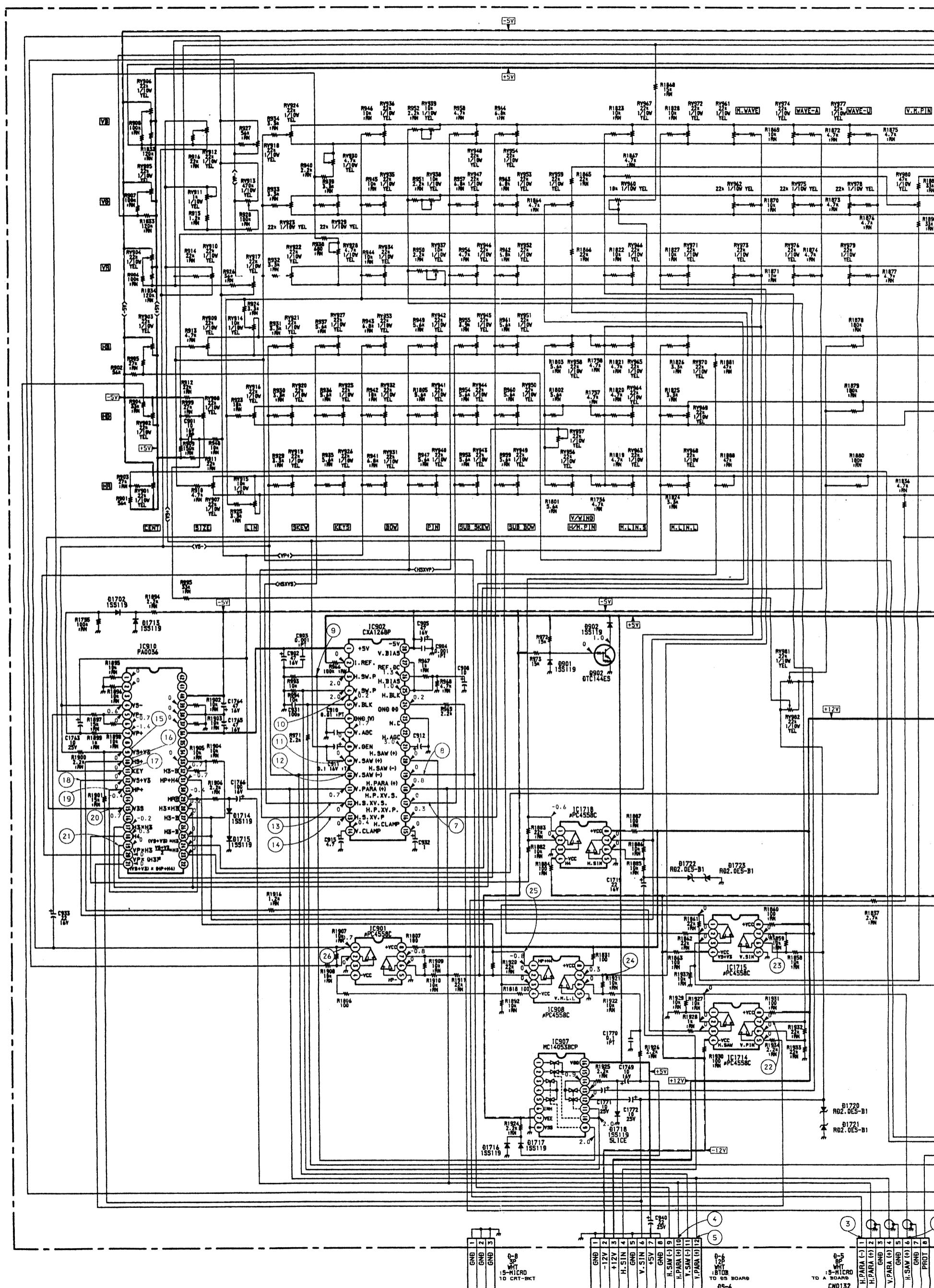
L

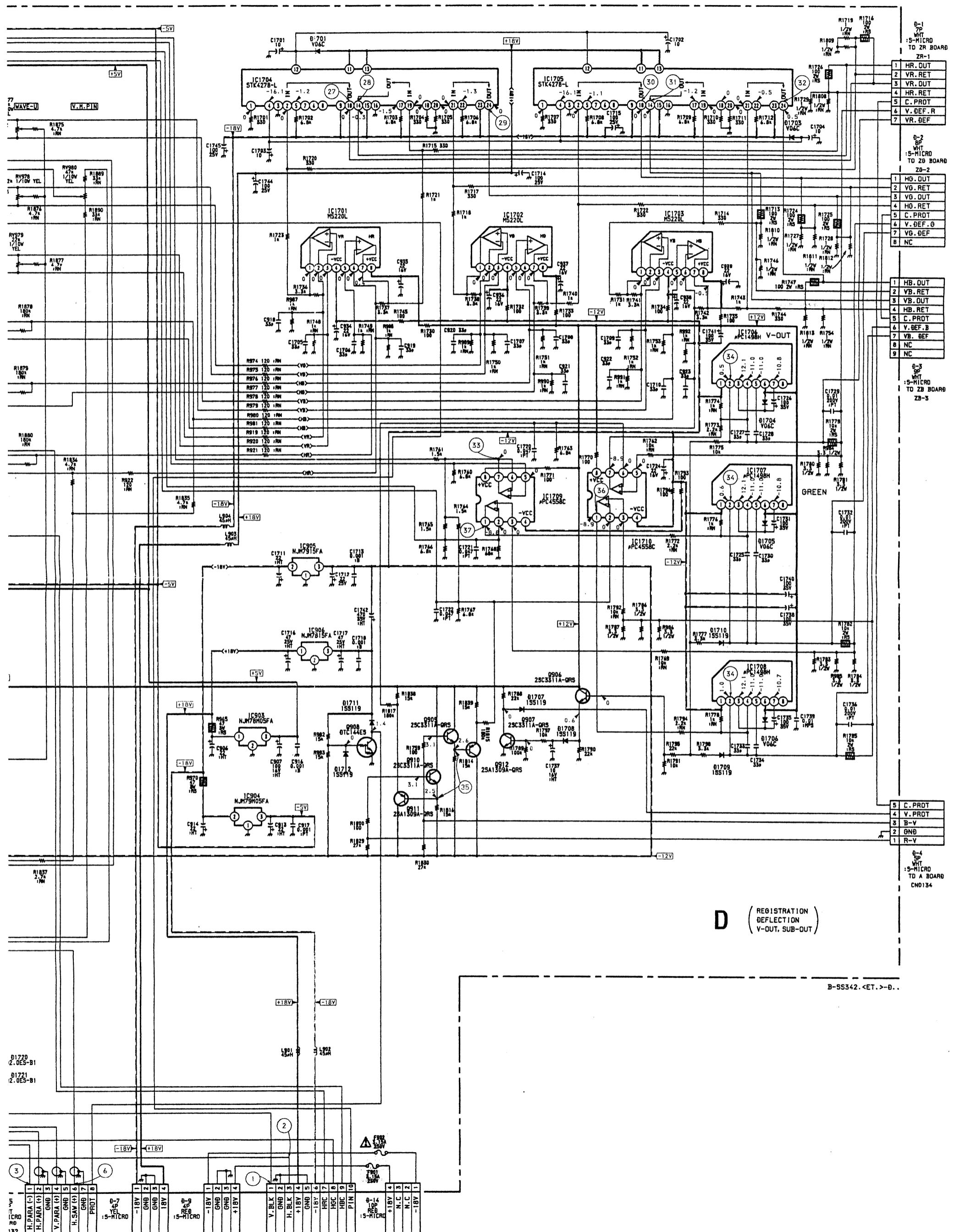
M

N

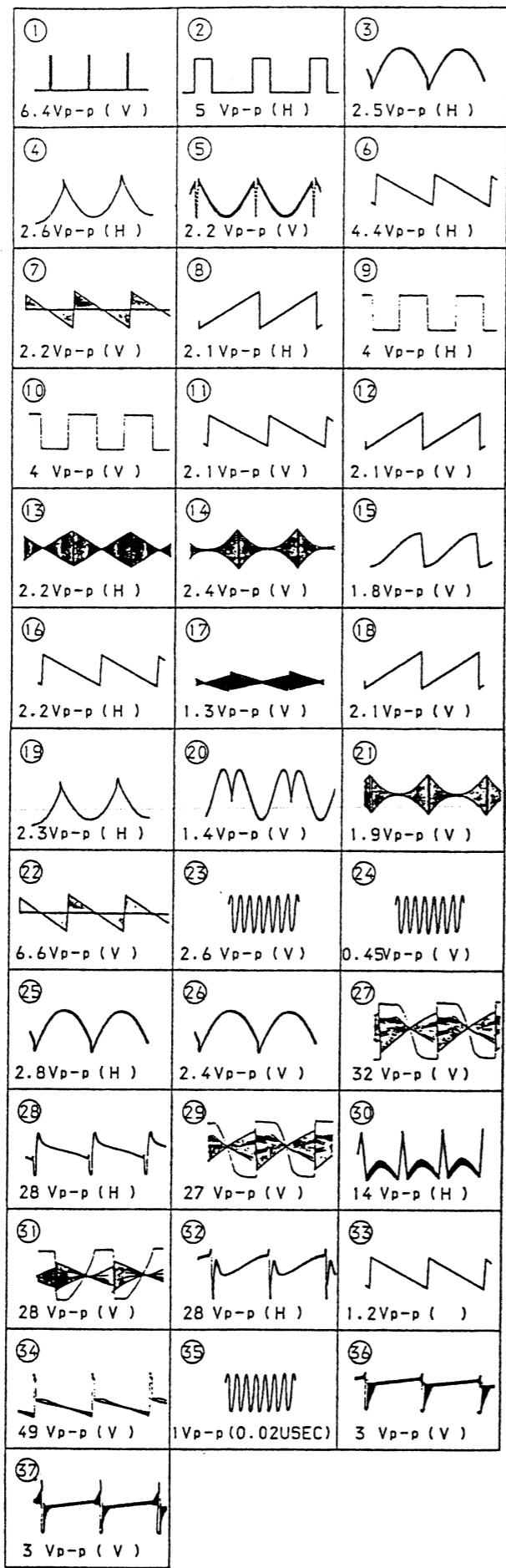
O

P

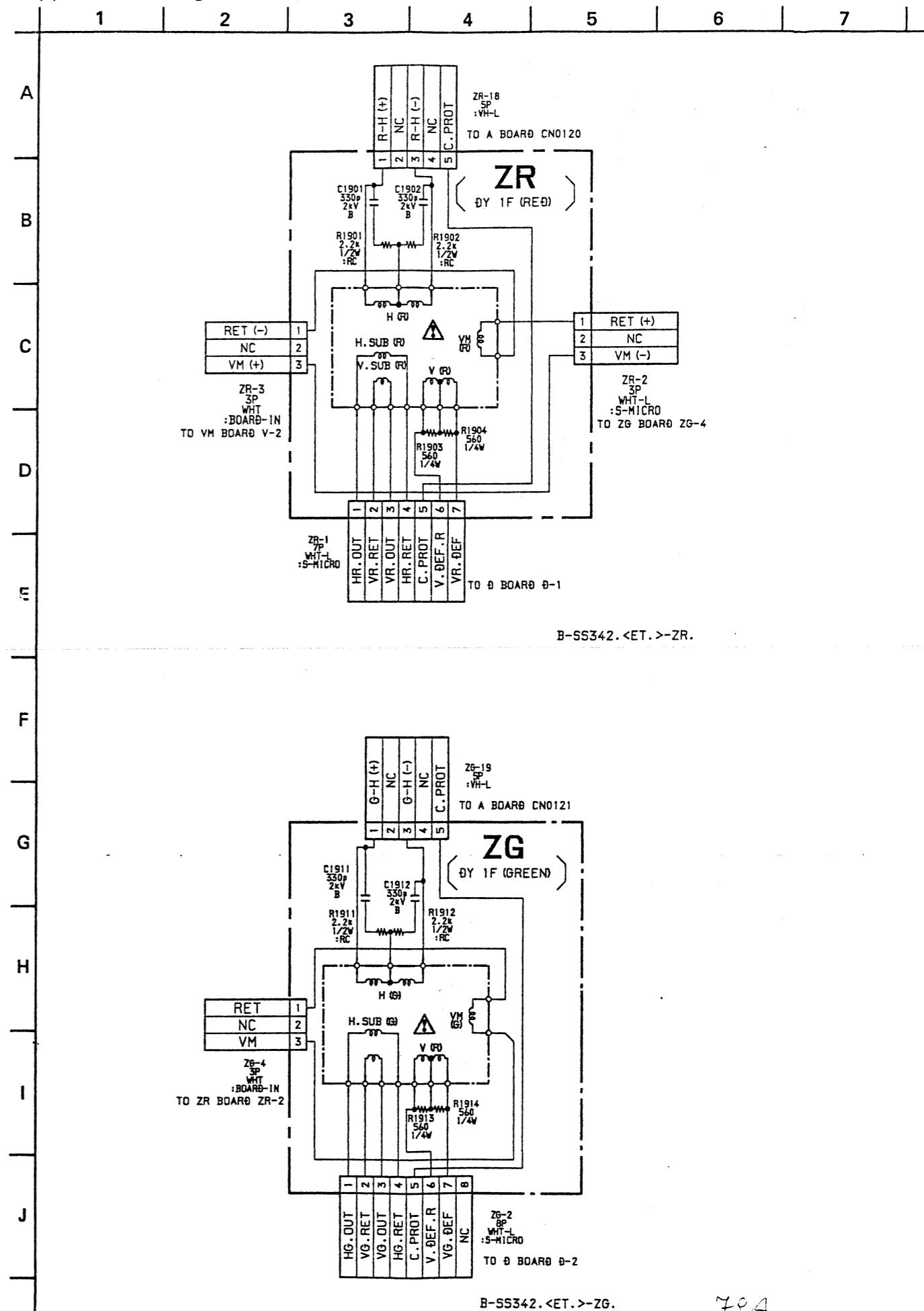




D BOARD WAVEFORMS

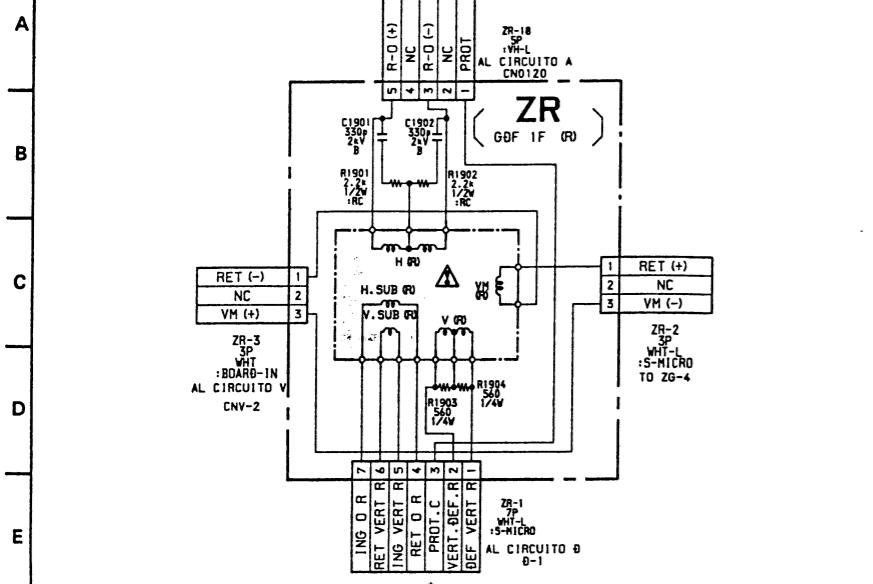


(6) Schematic Diagrams of ZR, ZG and ZB Boards

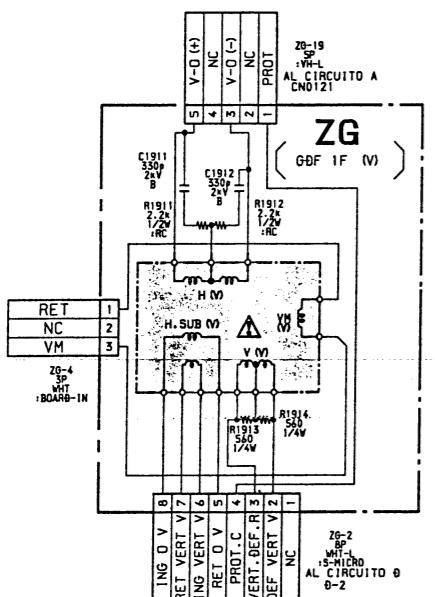


(6) Schema Elettrico Del Circuito ZR, ZG, ZB

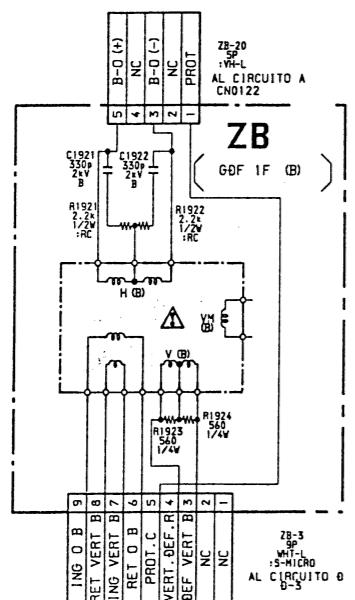
1 2 3 4 5 6 7



B-SS342.<ET.>-ZR.

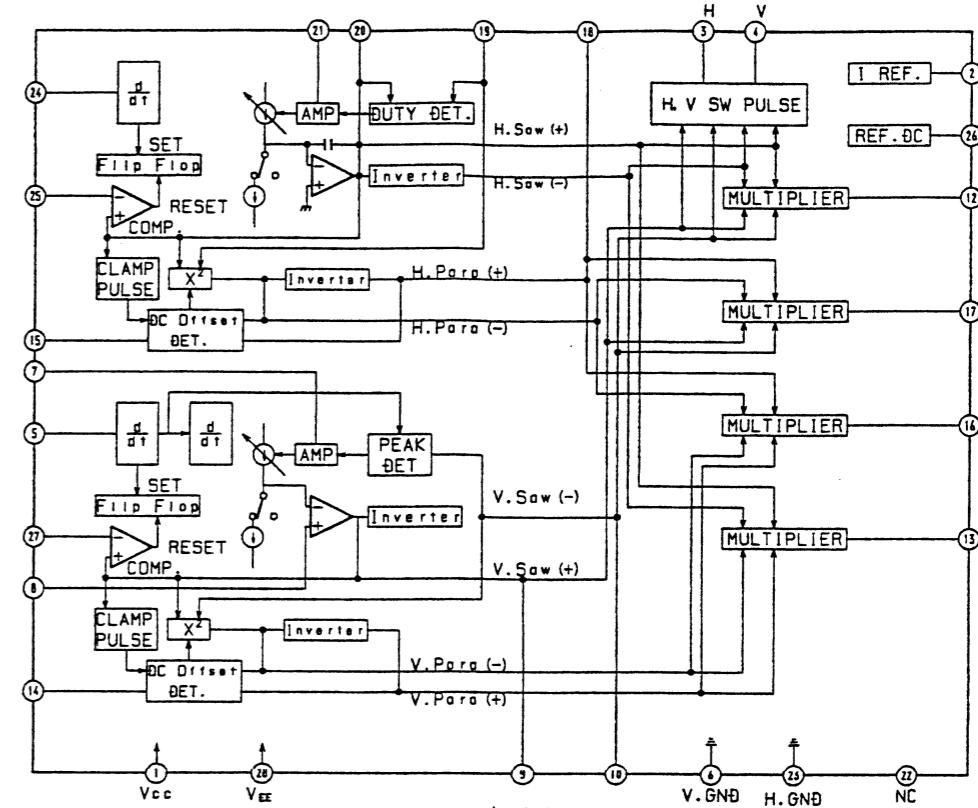


B-SS342.<ET.>-ZG.



B-SS342.<ET.>-ZB.

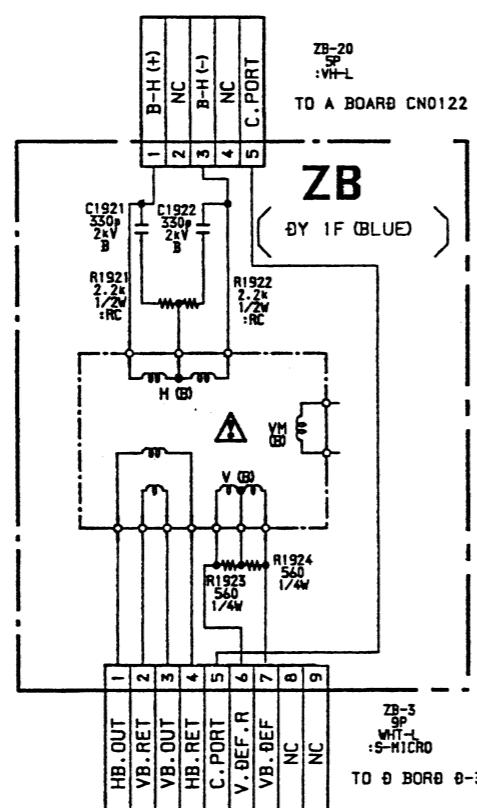
D Board IC902 CXA1268P



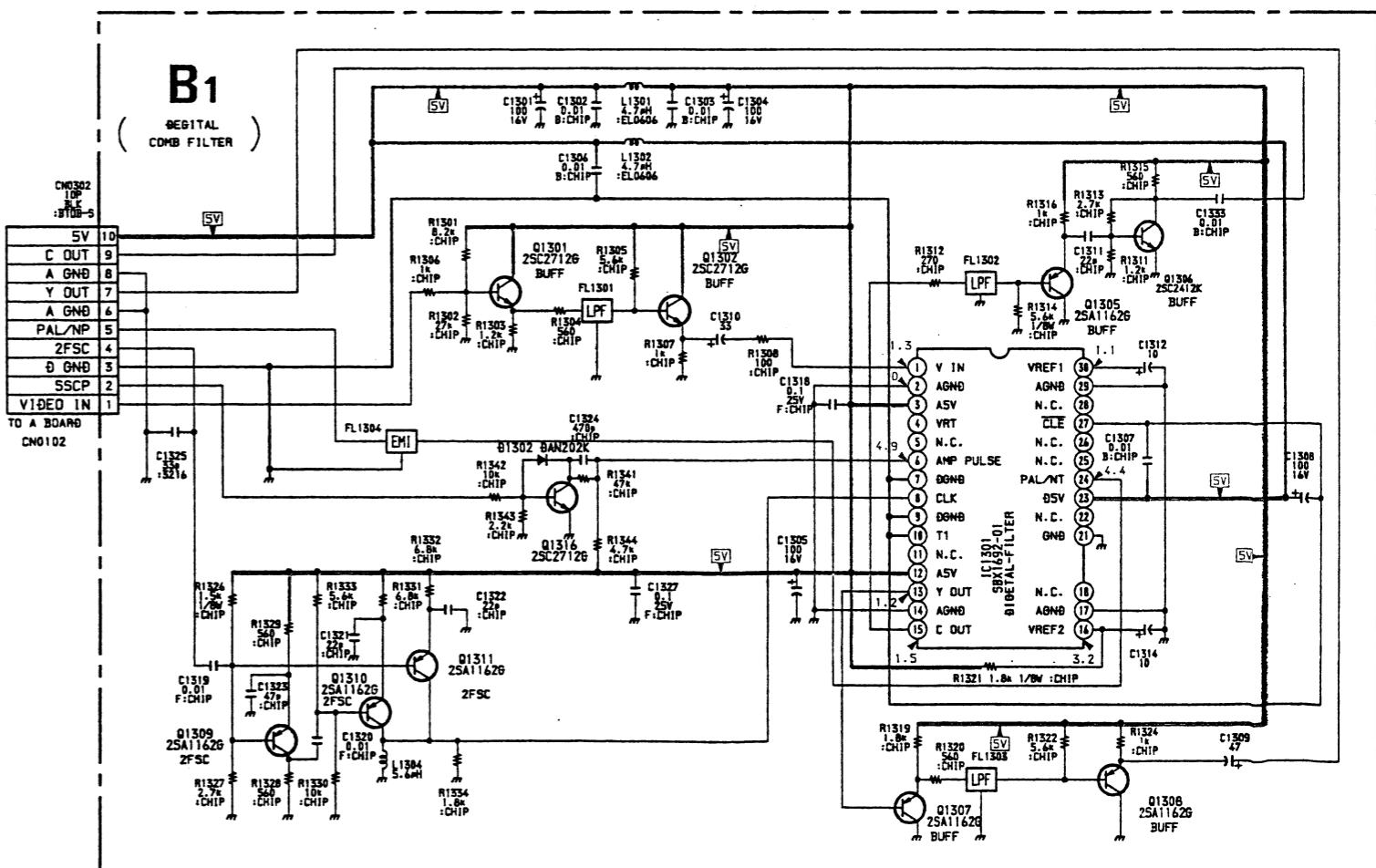
78

K
L
M
N
O
P

7) Schematic Diagrams of B1 and V Boards

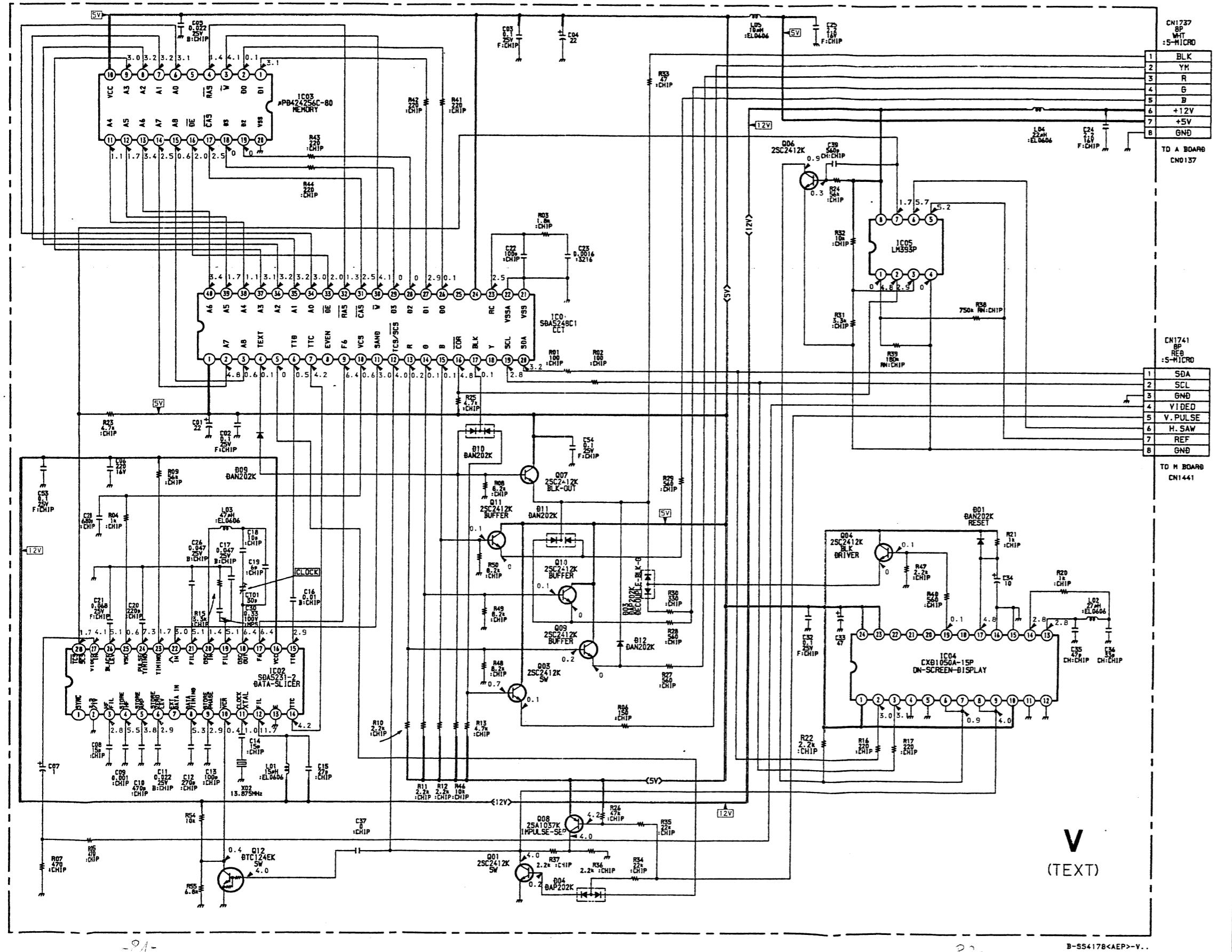


B-55342. <ET. >-ZB



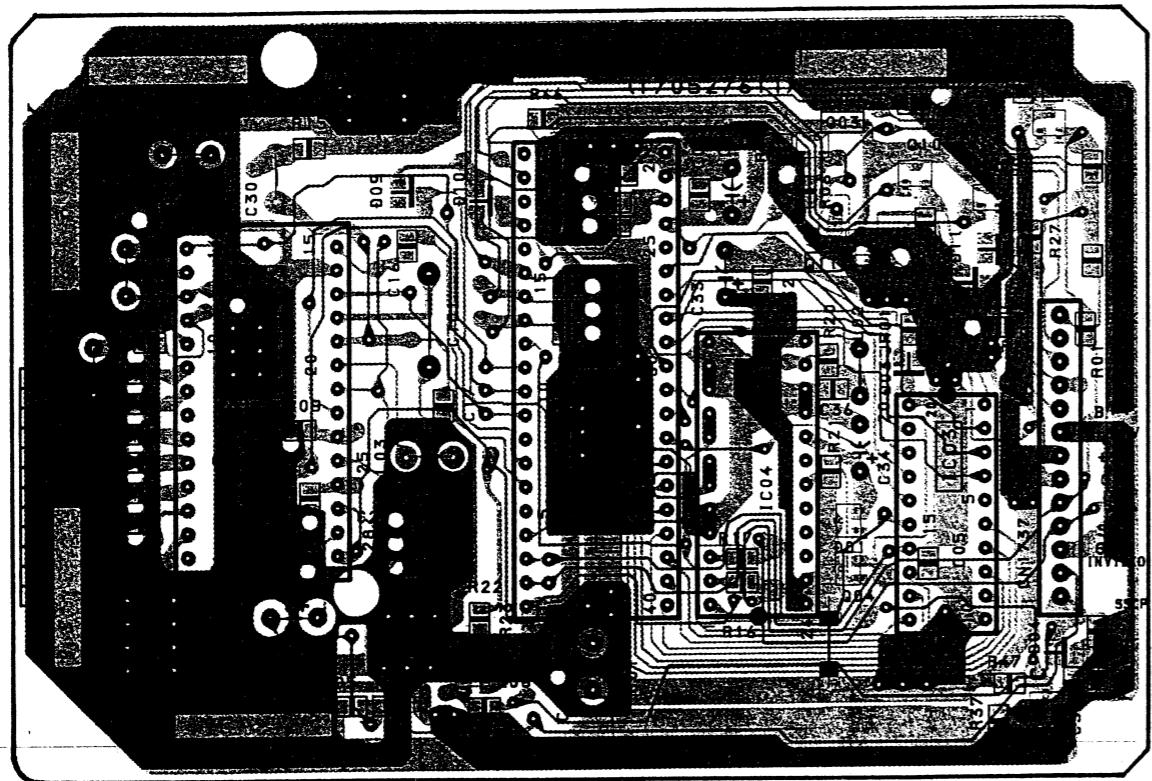
- 80 -

B-55342. <ET.>-B1

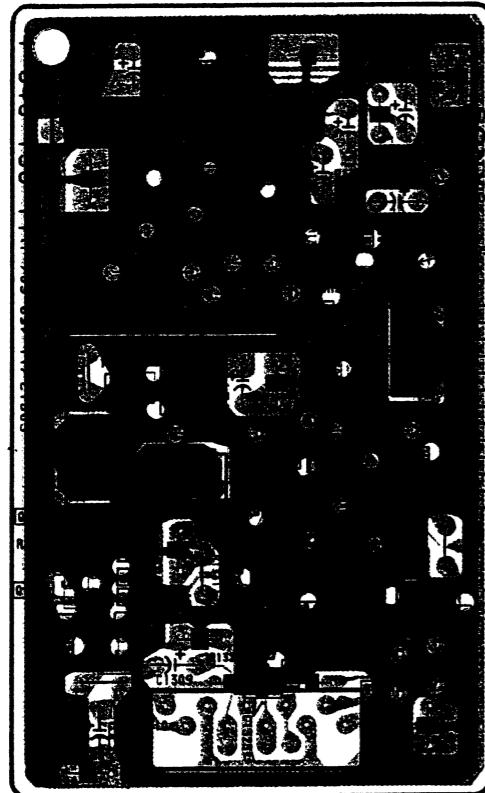


B1 [DIGITAL COMB FILTER]**V** [TEXT]**ZR** [DY 1F (RED)]**ZG** [DY 1F (GREEN)]**ZB** [DY 1F (BLUE)]

- V Board -

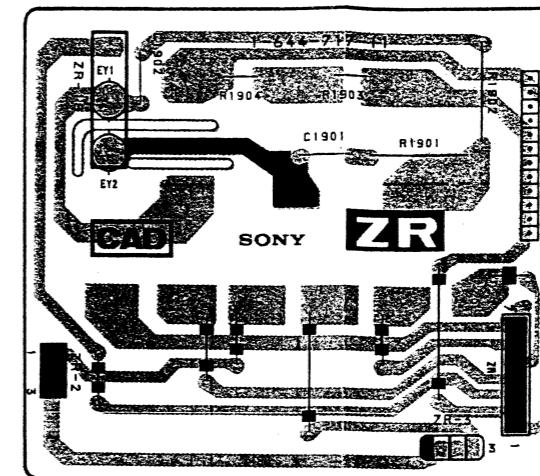


- B1 Board -

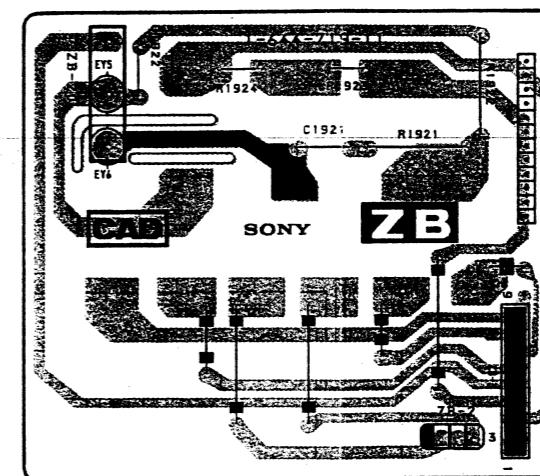


- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

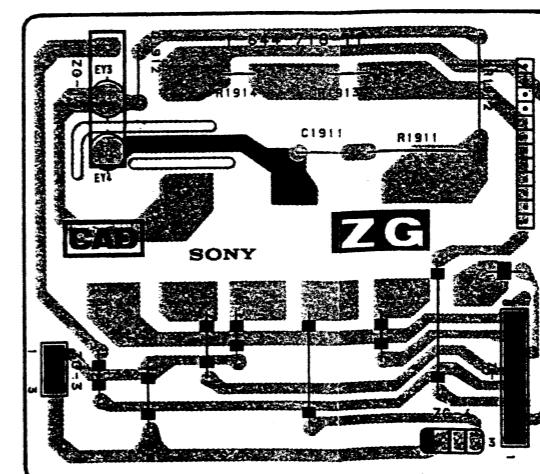
- ZR Board -



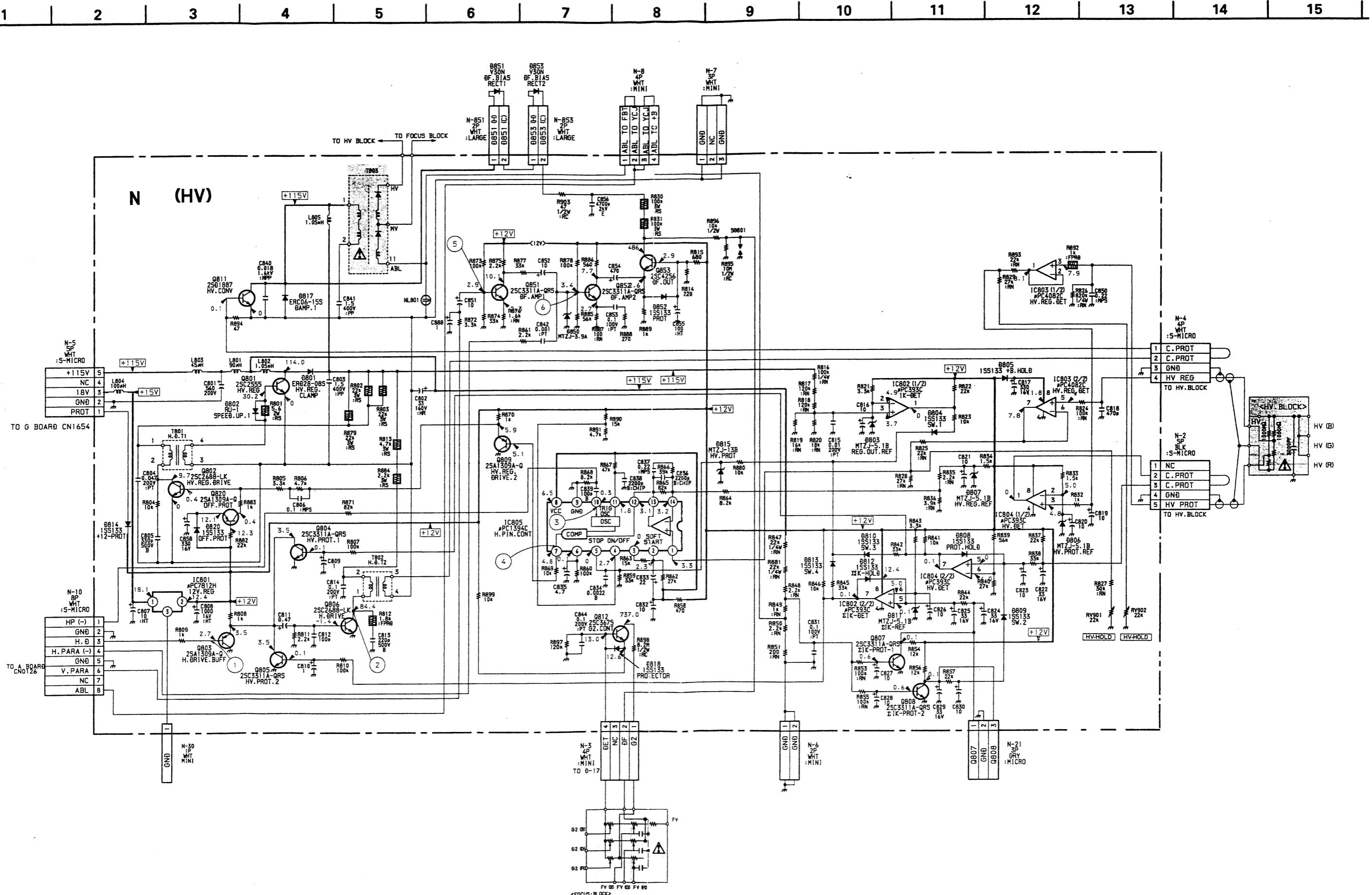
- ZG Board -



- ZB Board -

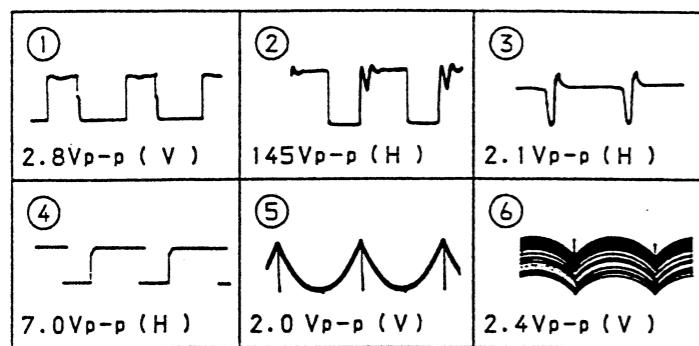


(8) Schematic Diagram of N Board

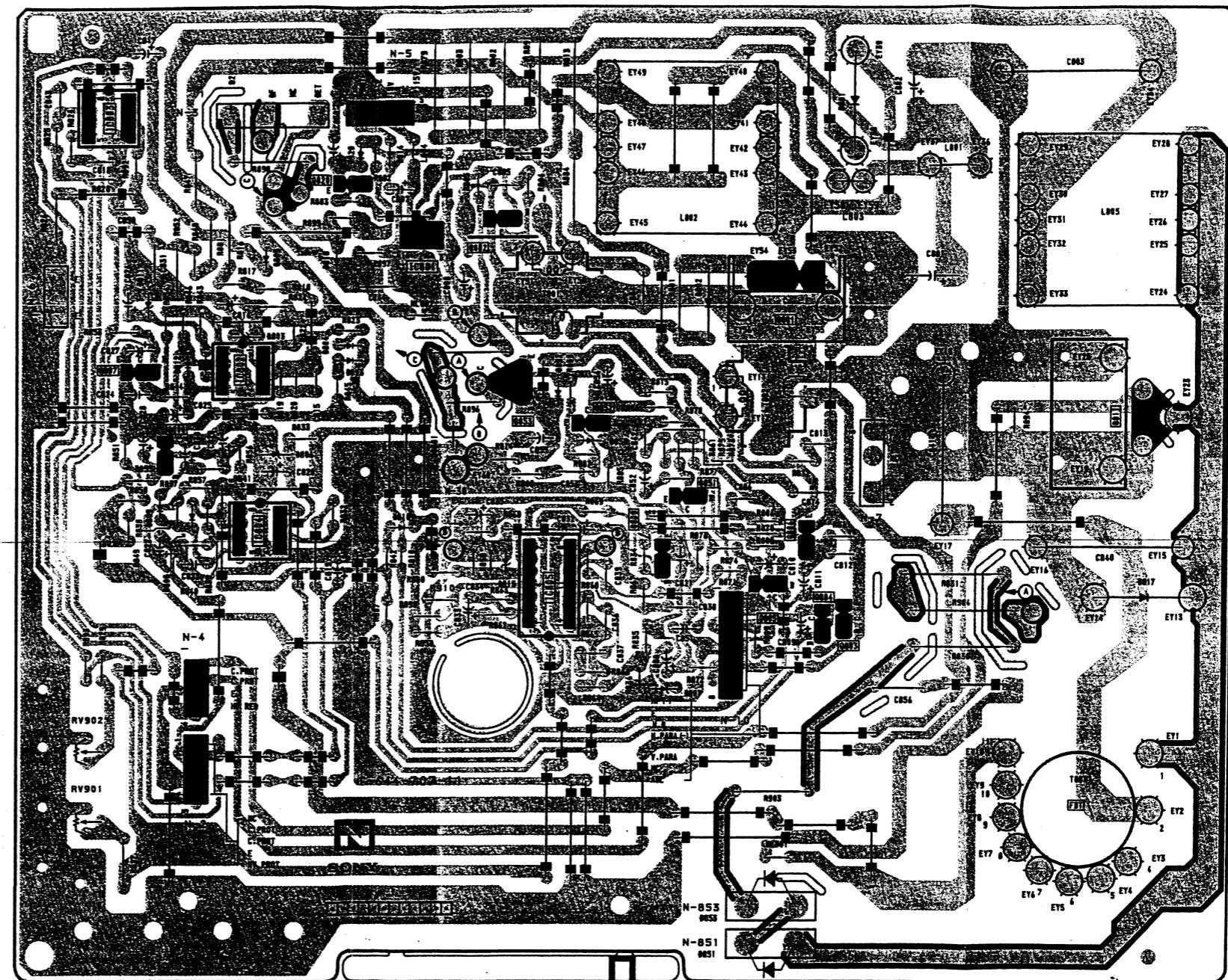


N [HV]

N BOARD WAVEFORMS

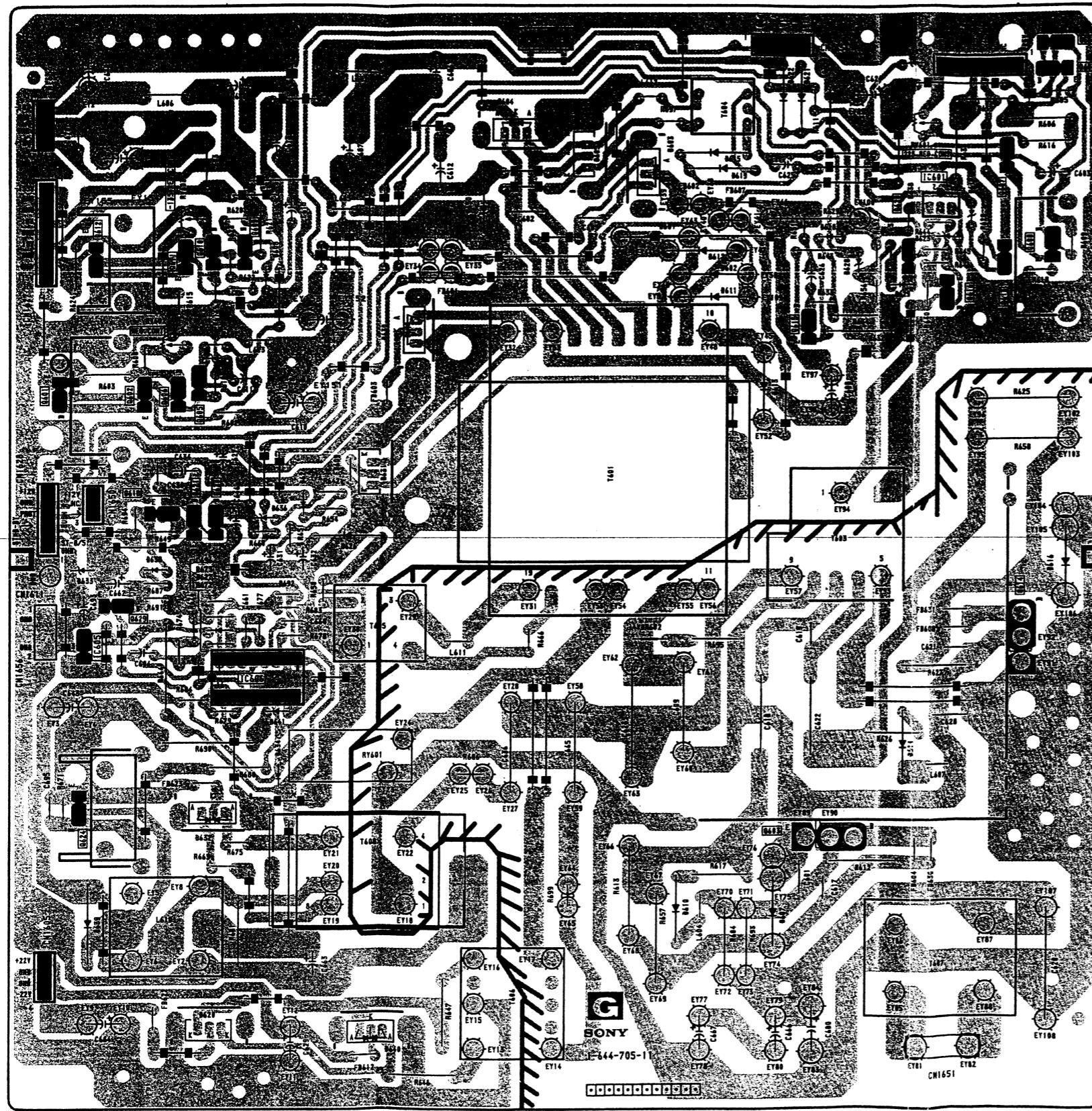


- N Board -

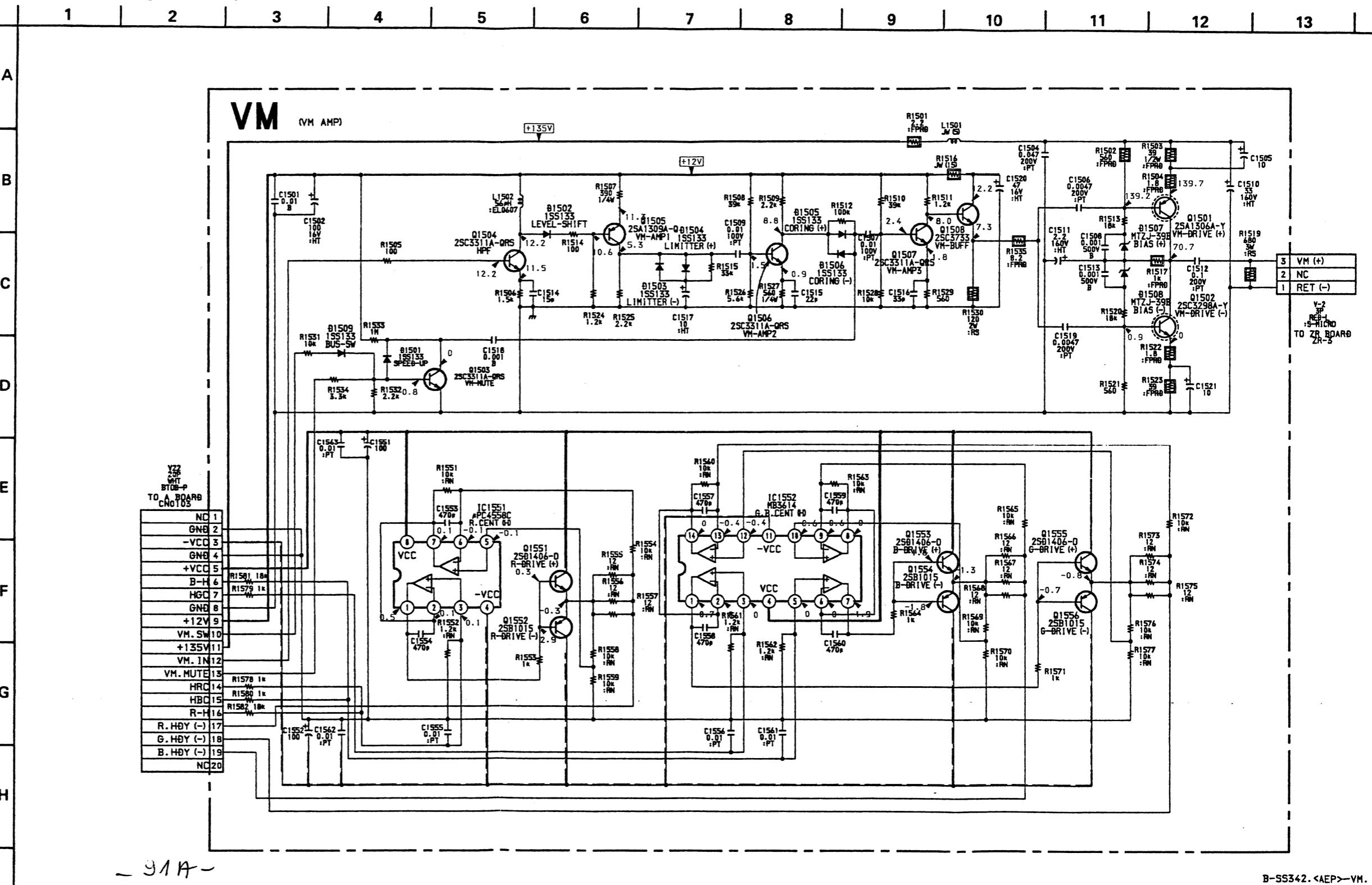


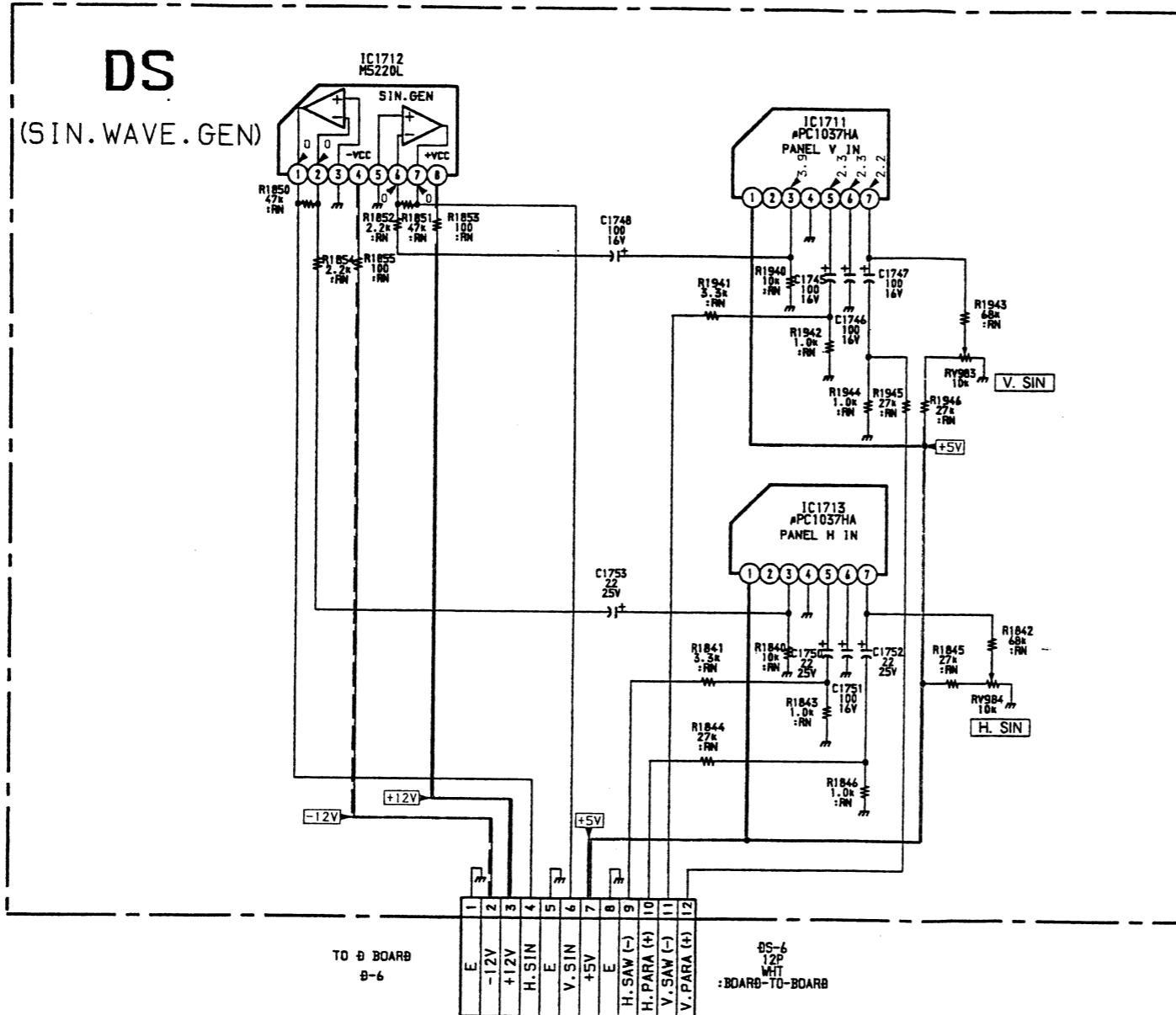
G [POWER SUPPLY]**VM** [VM AMP]**Ds** [SIN, WAVE, GEN]

— G Board —

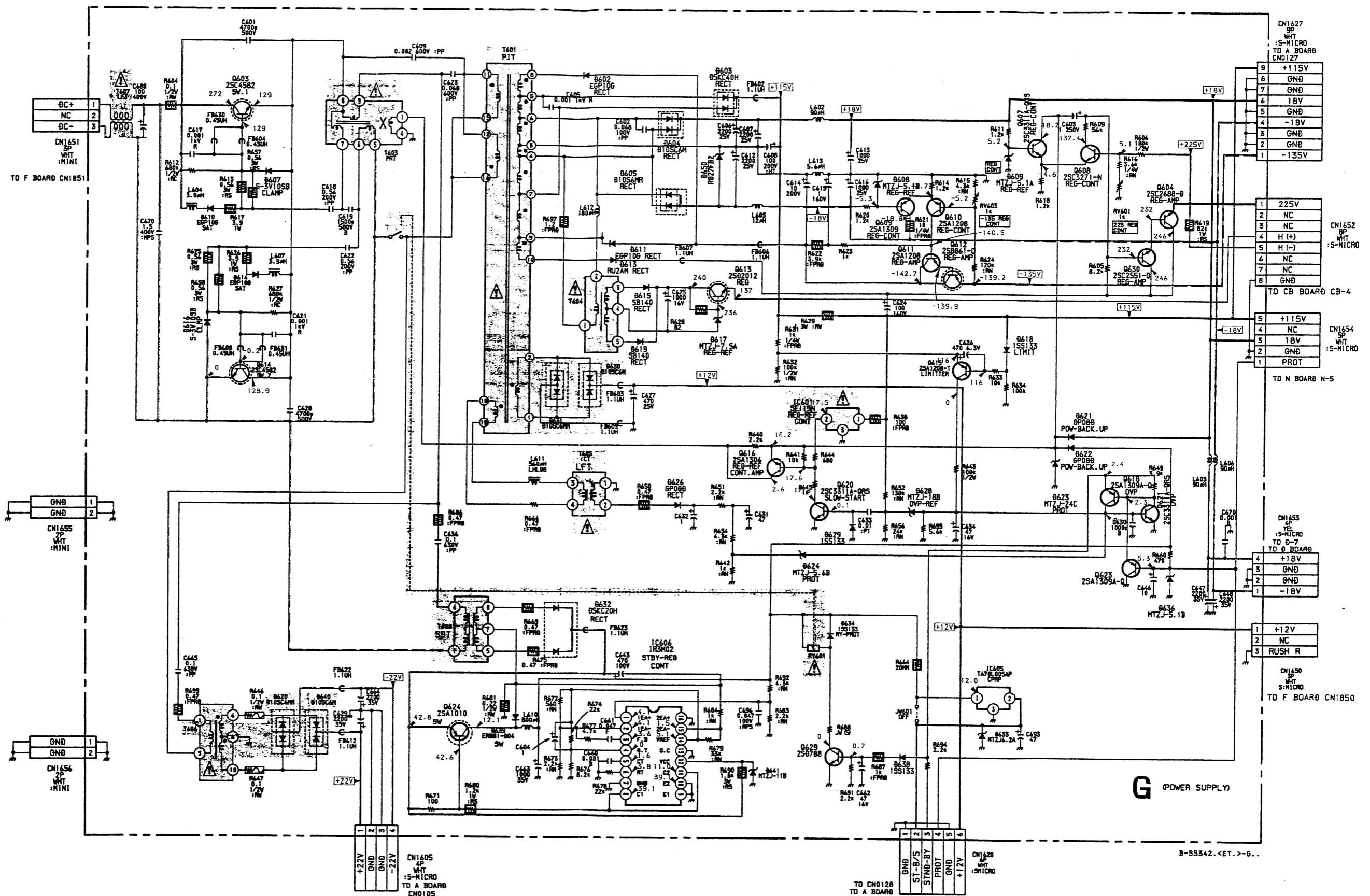


(9) Schematic Diagrams of VM, DS and G Boards



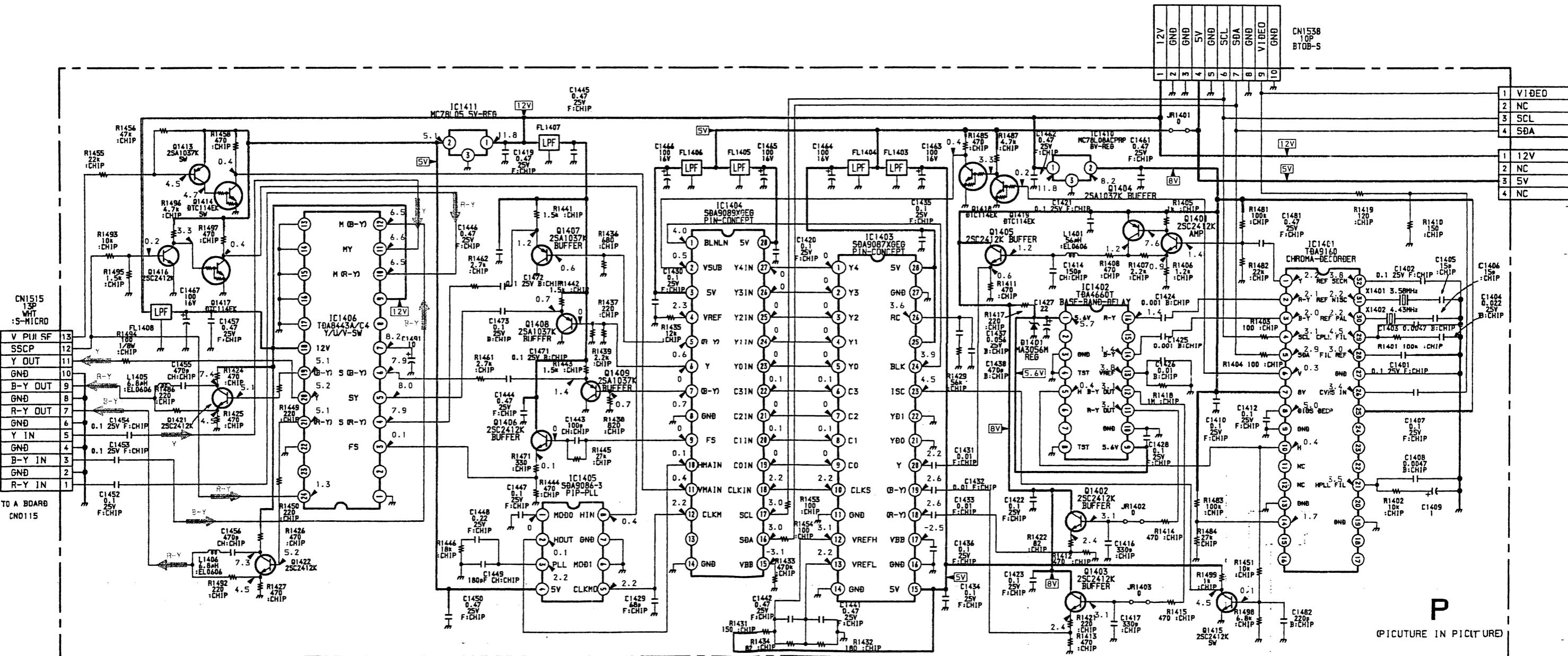


B-55342. <ET.>-B5.

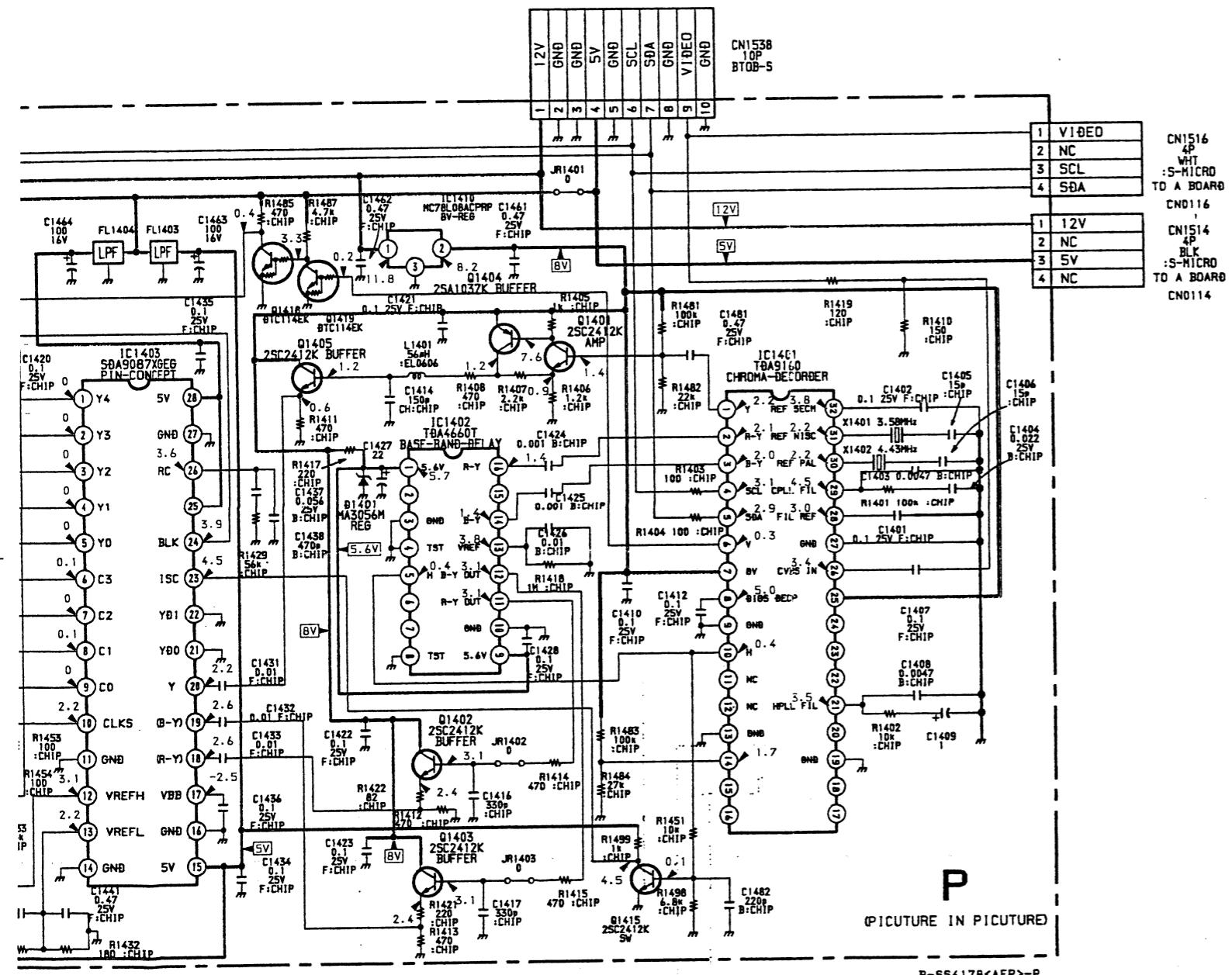


Schematic Diagrams of CR, CG, CB and P Boards (10)

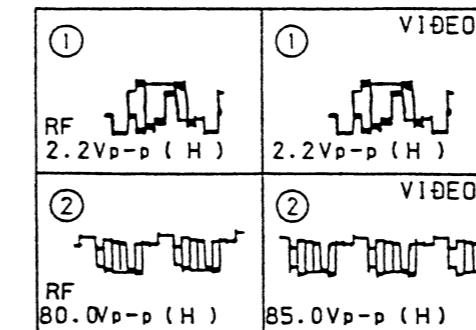
1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 1



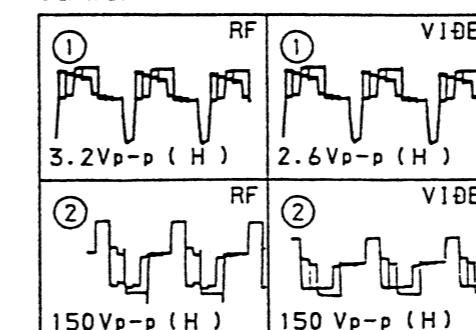
0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



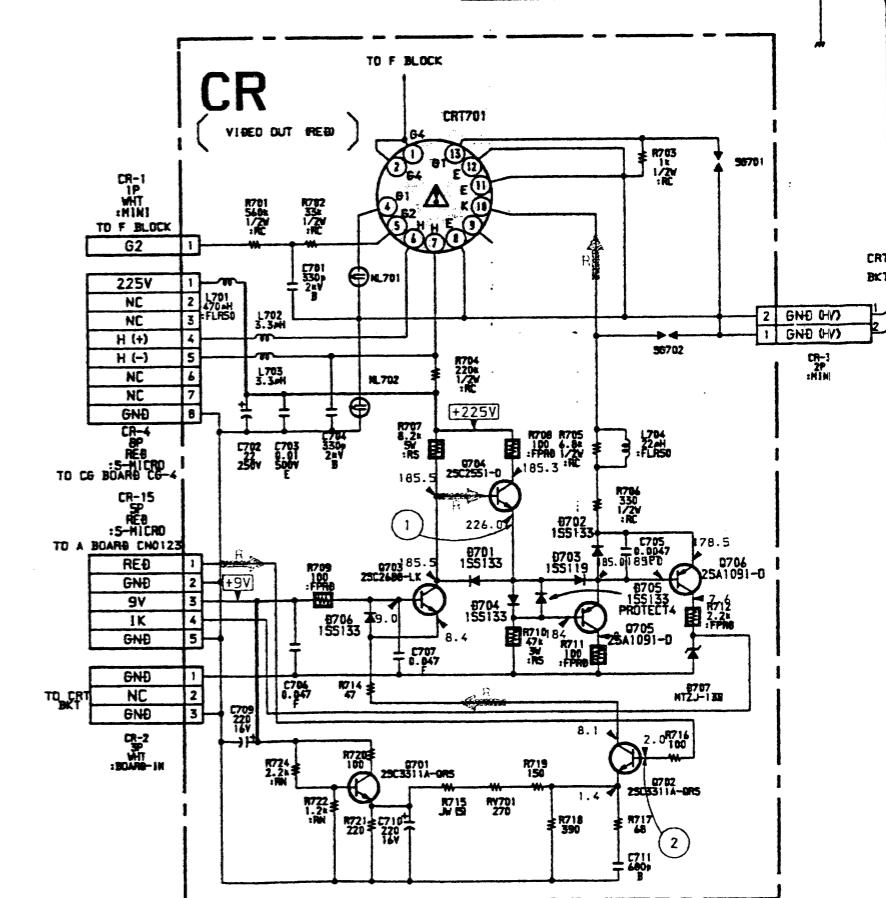
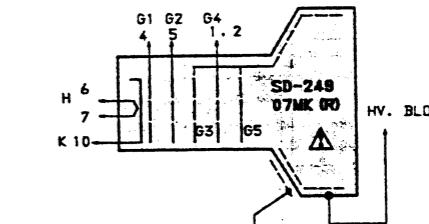
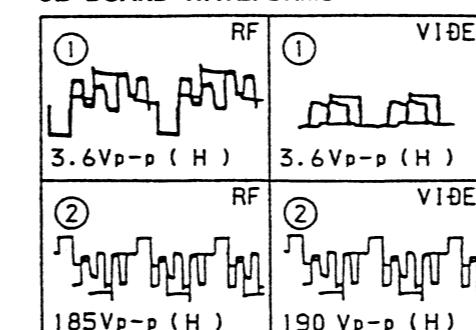
CR BOARD WAVEFORMS

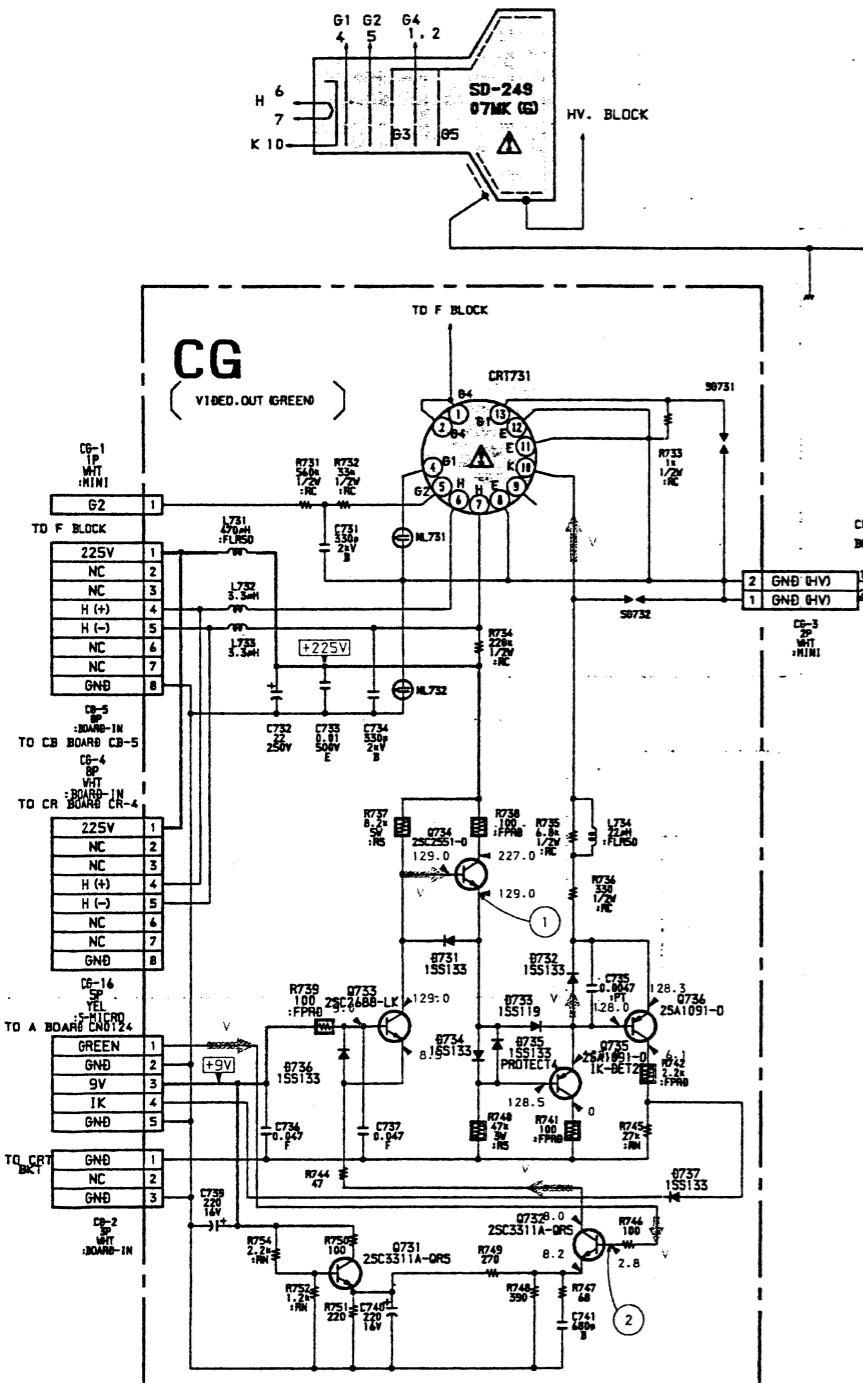


CG BOARD WAVEFORMS



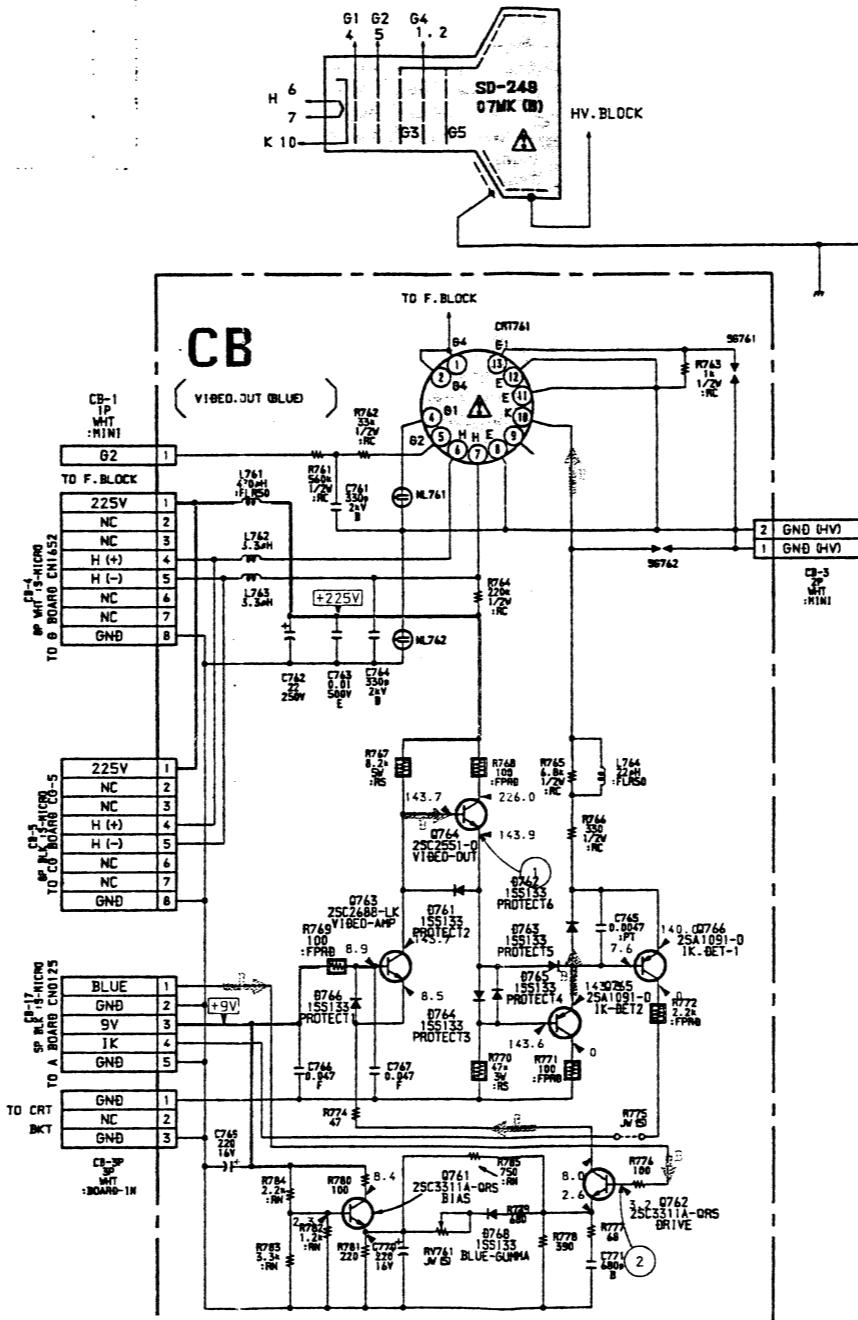
CB BOARD WAVEFORMS





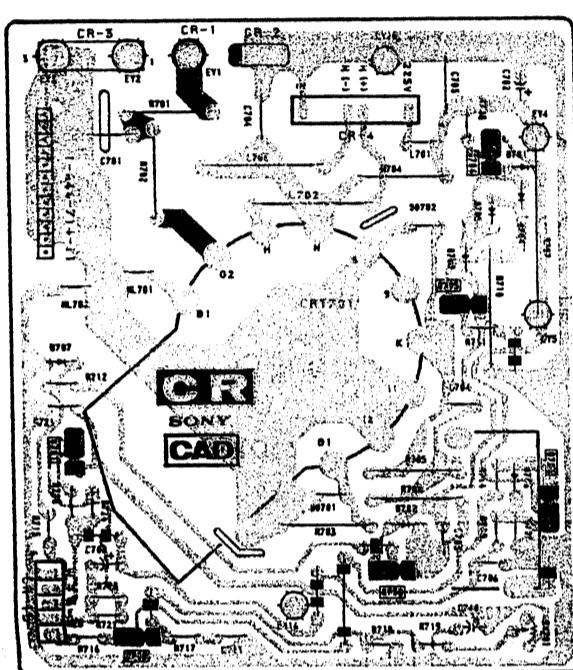
B-55342.-<ET.>-CG.

-96-

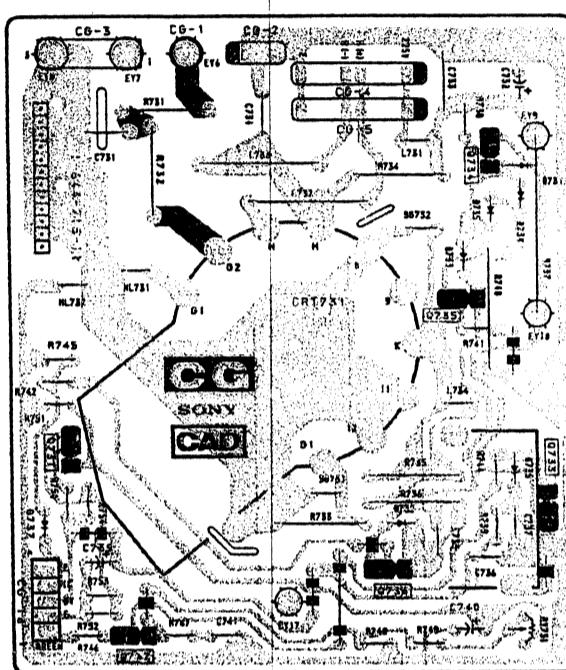


B-55342.-<ET.>-CB.

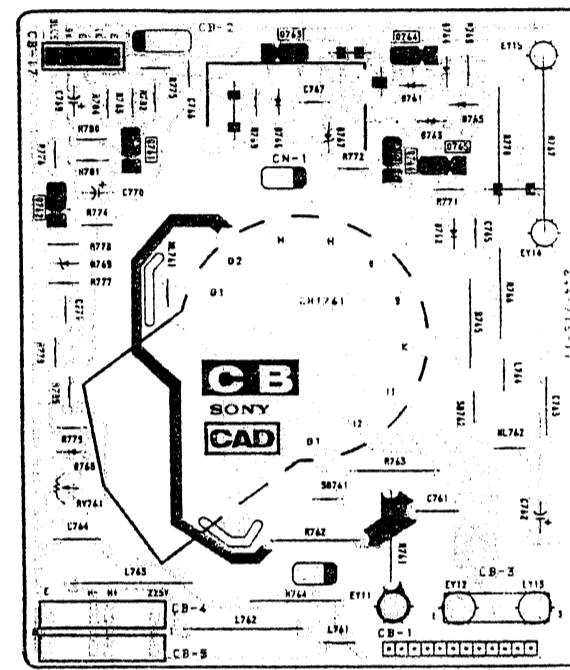
- CR Board -



- CG Board -



- CB Board -



- 97 -

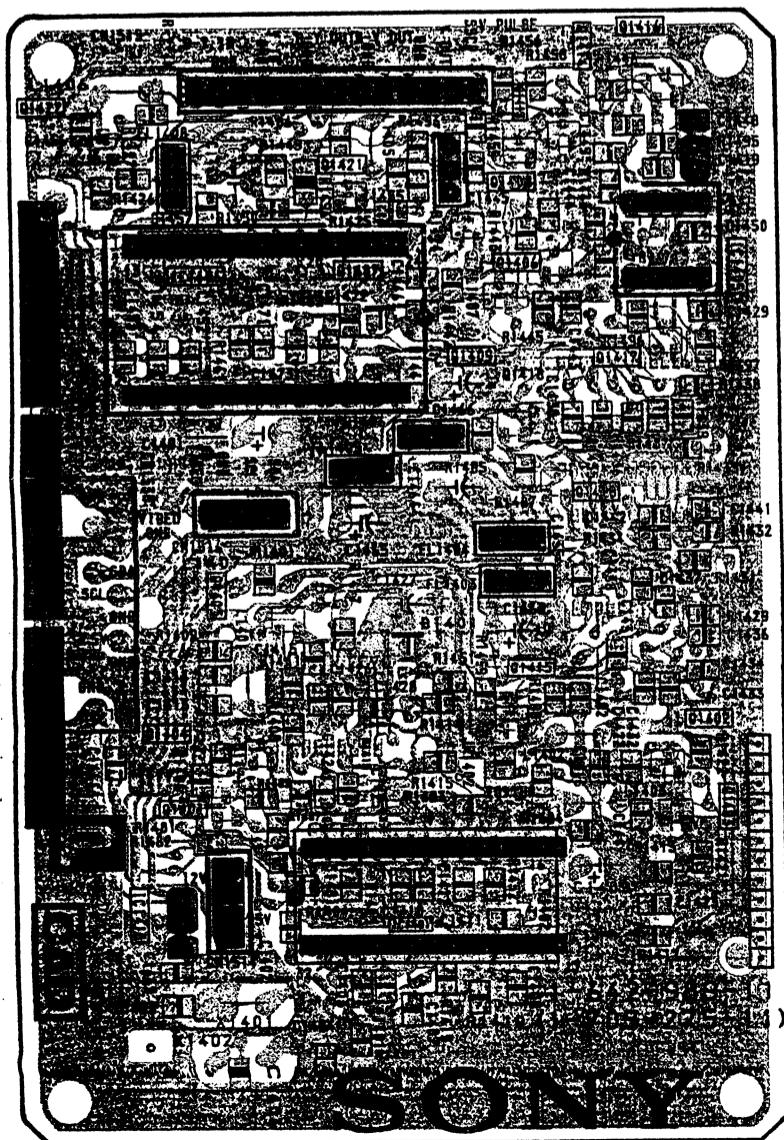
P [P N P]

[VIDEO OUT (R)]

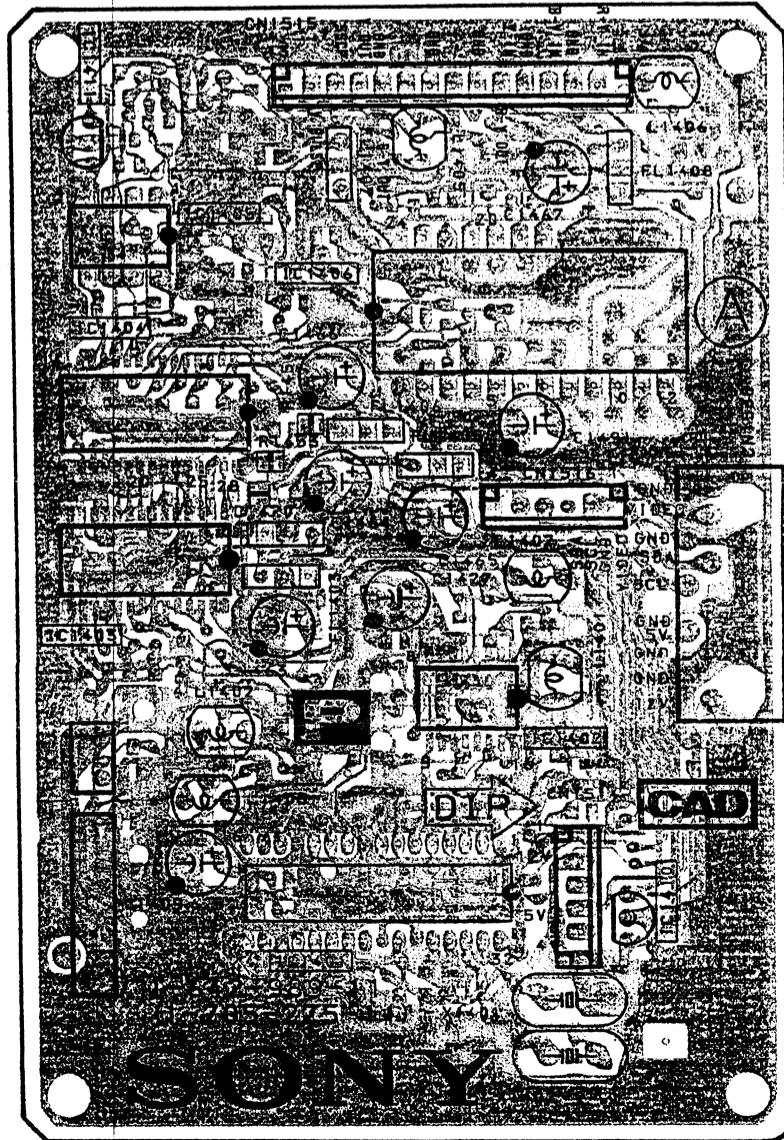
Cg [VIDEO OUT (G)]

CB [VIDEO OUT (B)]

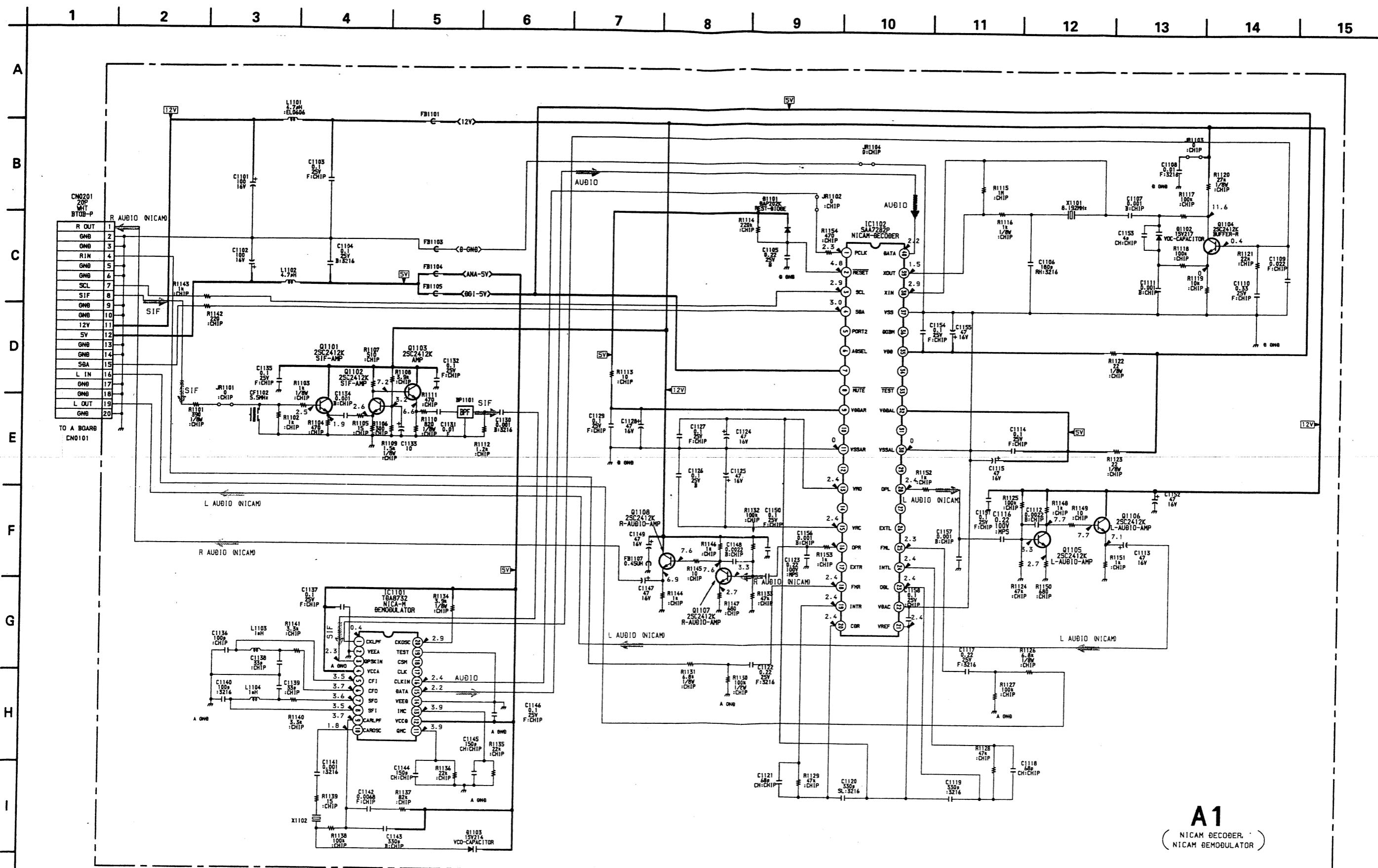
– P Board (Conductor Side) –



— P Board (Component Side) —



(11) Schematic Diagram of A1 Board

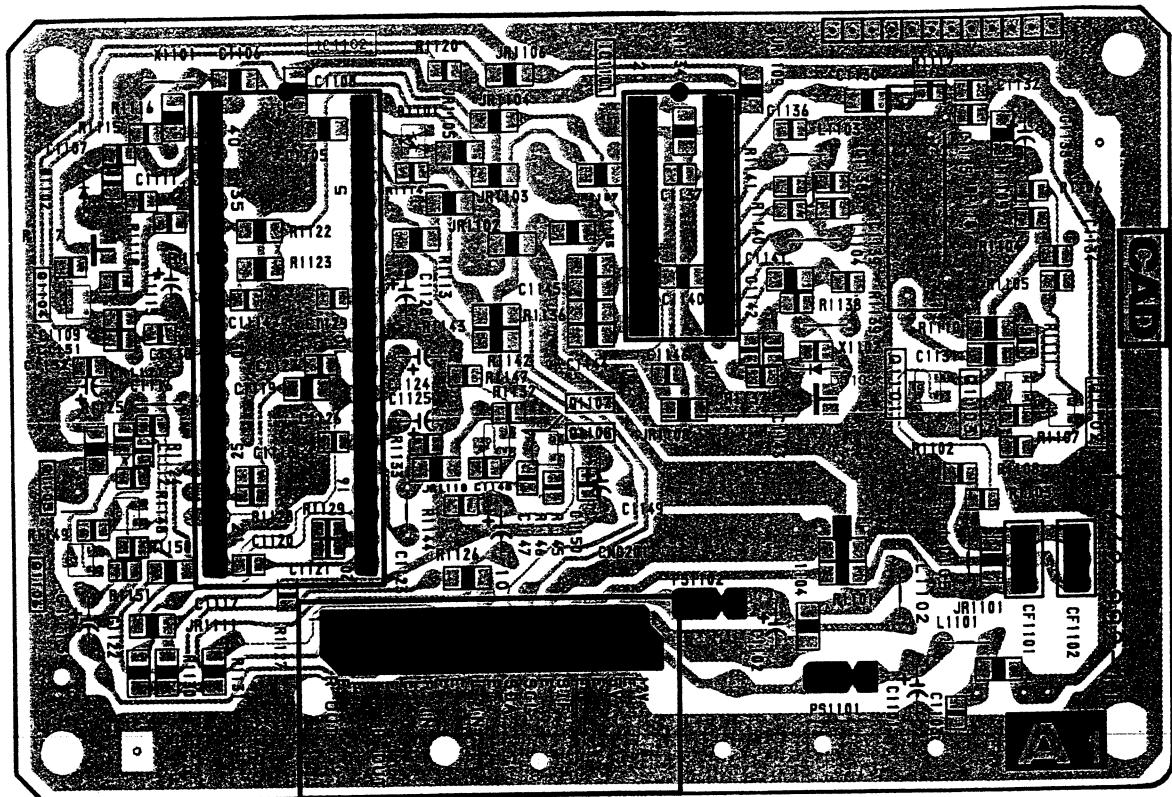


A1
(NICAM DECODER,
NICAM DEMODULATOR)

A-1

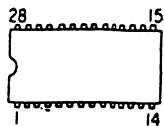
[NICAM DECODER,
NICAM DEMODULATOR]

- A1 Board -

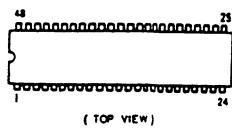


5-4. SEMICONDUCTORS

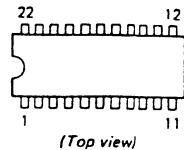
CXA1268P
M27C512-20B1-AE21
SDA5231-2
SDA9087XGEG
SDA9089XGEG
TDA6612



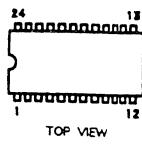
CXA1545AS
CXA1587S



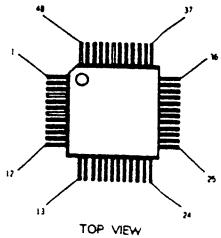
CXA1656S



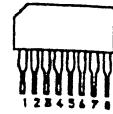
CXD1050A-15P
TDA8443A/C4
TDA9145



CXD2018Q



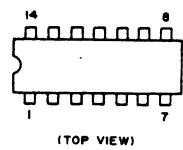
CX-7948A
M5220L
 μ PC1498H



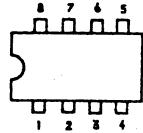
CXA1315P
IR3M02
MC14053BCP
 μ PD4053BC



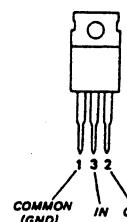
LM324N
MB3614



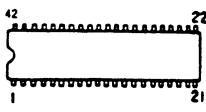
LM393P
SDA9086-3
TDA2822M
TEA2114
TL082CP
 μ PC393C
 μ PC4082C
 μ PC4558C
X24C16S



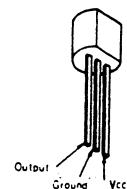
NJM79M05FA
NJM7915FA
RC79M05FA



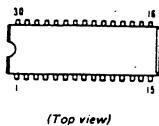
PA0036



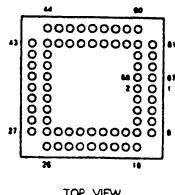
RC78L05A
TA78L005AP



SBX1692-01



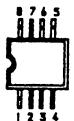
SDA30C162



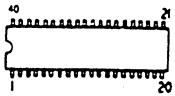
L78M05
MC7809CT
NJM78M05FA
RC78M05FA
NJM7815FA
RC7805FA
RC7809FA
RC7812FA
RC7815FA
 μ PC7812H



LM358D
LM358DR-E1



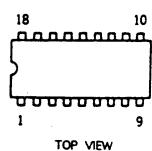
SAA7282P
SDA5248C1



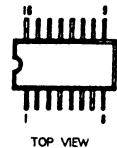
STK-4278L



TDA2595/V9



TDA4660T
TDA4660V2



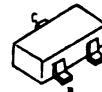
DTC144ES



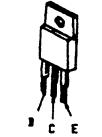
2SA1013-O
2SA1091-O
2SA1208-S
2SC2551-O
2SD788-5



DTA124EK
DTA144EK
DTC114EK
DTC124EK
DTC144EK
2SA1037K
2SA1162-G
2SC2412K
2SC1623-L5L6
2SC2413K-Q



2SA1010-M
2SA1261-K
2SB861-C
2SB1015
2SB1094-LK
2SC3675
2SD1138-C
2SD1406-YGR



2SA1309A-Q
2SA1175-HFE
2SC2785-HFE
2SC3311A-QRS



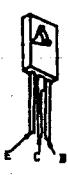
2SA1301-O



2SA1306A-Y
2SC3298A-Y
2SC3298B-Y



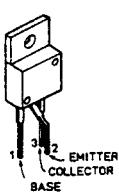
2SB649A-C
2SC2688-LK
2SC2688-LK
2SC3271-N
2SC3271-P



2SB734-34
2SC3733



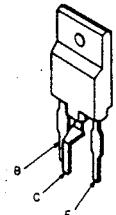
2SC4256CB
2SC4632-CB7



2SD2012



2SD1887-CA



D10SC6MR



DAN202K
MA152WK



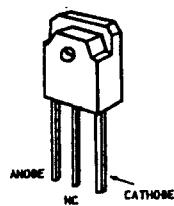
DA204K
1SS226



DAP202K
1S2836

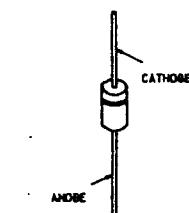


DD50R

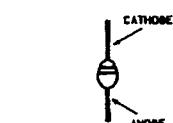


ECP10G
MTZJ-13B
MTZJ-13C
MTZJ-3.9A
MTZJ-3.9B
MTZJ-33C
MTZJ-39B
MTZJ-5.1A
MTZJ-5.1B
MTZJ-5.6B
MTZJ-9.1
MTZJ-7.5A
MTZJ-11B
MTZJ-18B
MTZJ-24C
RD18ES-B2
RD2.0ES-B1
RD27F-B2
RD5.1ES-B2
RD5.6ES-B2
RD7.5ES-B2
ISS119
ISS133

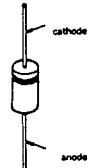
ERC06-15S
ERB81-004
ERC81-004
RU-1C
RU-2AM
RU-3AM
S3V10SB



ERC38-08
GP08D
U05G
V06C
V09G
V19E
V30N



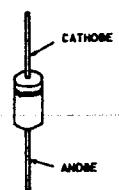
ERD28-08S



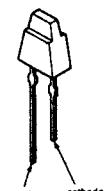
MA3056
MA3056M
RD5.6M-B2



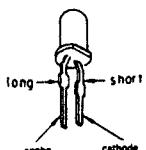
SB140



MTZJ-6.2A
SLP361B



TLR124



SECTION 6

EXPLODED VIEWS

NOTE:

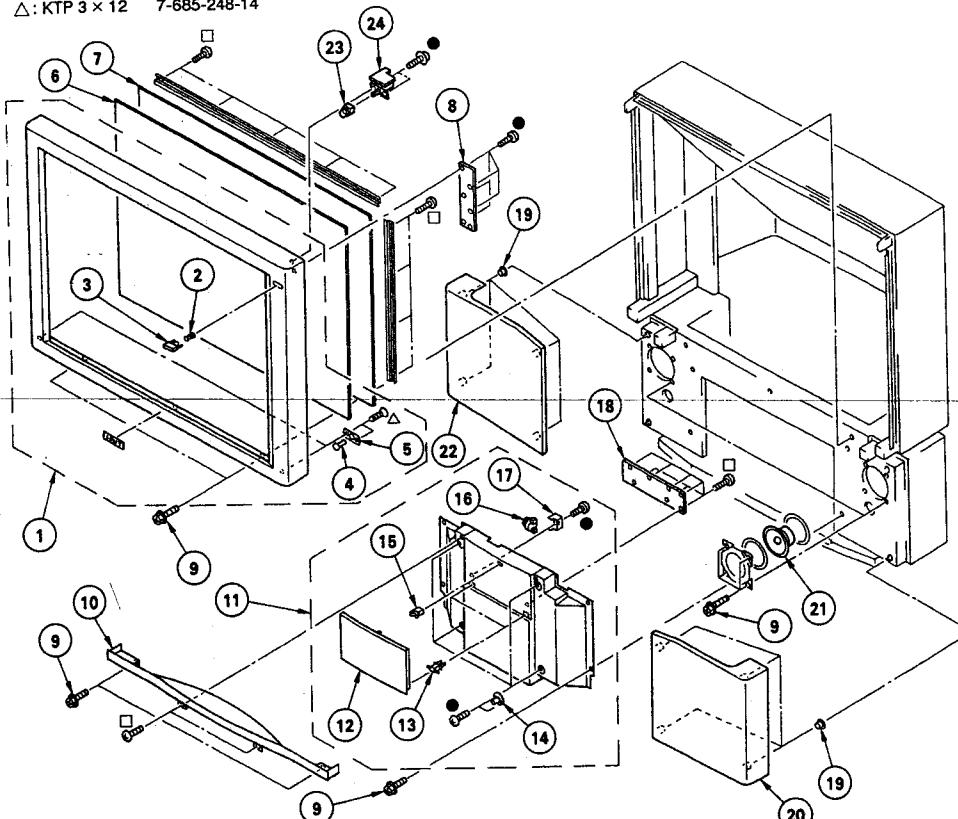
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a callout number in the remark column.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

6-1. CONTROL PANEL

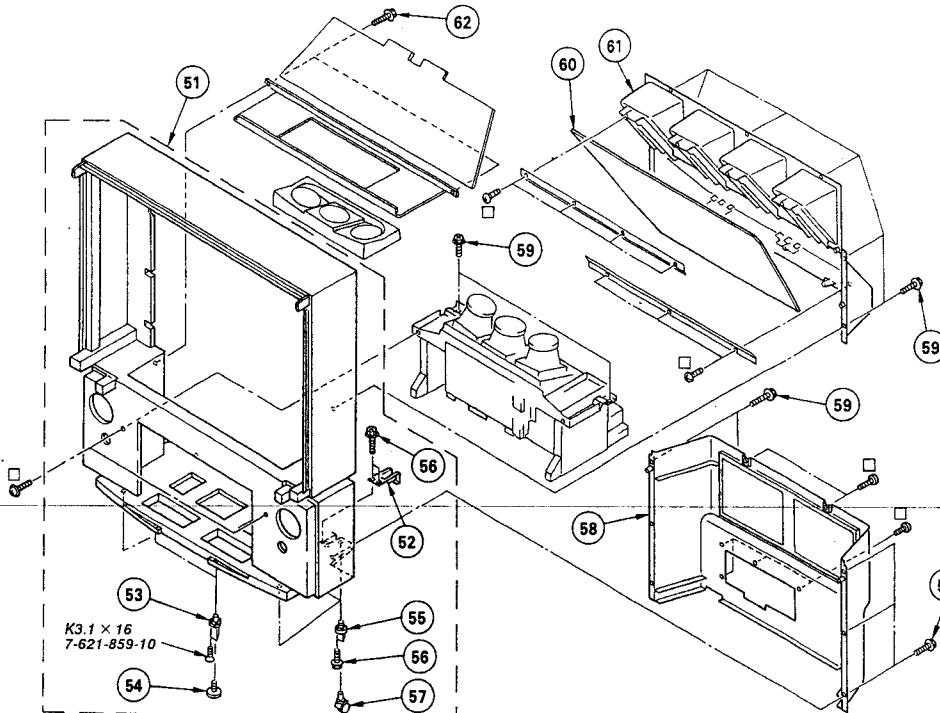
- : BVTP 3 x 12 7-685-648-79
- : BVTP 4 x 12 7-685-661-79
- Δ : KTP 3 x 12 7-685-248-14



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	X-4030-609-1	FRAME ASSY, SCREEN		2-5	13	3-703-035-11	SHAFT, LID
2	3-308-717-00	SPRING, COMPRESSION			14	4-843-806-00	CATCHER, PUSH
3	4-037-635-01	BUTTON, POWER			15	4-392-036-01	NUT, FITTING
4	4-838-452-00	STRIKE			16	3-721-204-21	DAMPER
5	4-838-453-00	SUPPORT			17	4-397-047-01	HOLDER, DAMPER
6	4-037-360-11	PLATE (L), DIFFUSION			18	*1-644-711-11	H2 BOARD
7	4-037-359-11	PLATE (R), DIFFUSION			19	4-838-438-00	LATCH
8	*1-644-710-11	H1 BOARD			20	X-4030-569-1	GRILLE (R) ASSY, SPEAKER
9	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD			21	1-504-145-11	SPEAKER (12CM)
10	*4-037-620-01	SCUTCHON, FRONT, FINAL			22	X-4030-570-1	GRILLE (L) ASSY, SPEAKER
11	*1-644-709-01	FACE ASSY, CONTROL			23	*1-644-636-01	ADJUST. BUTTON
12	4-037-632-01	LID, FINAL CONTROL			24	*1-644-712-11	H3 BOARD

6-2. CABINET

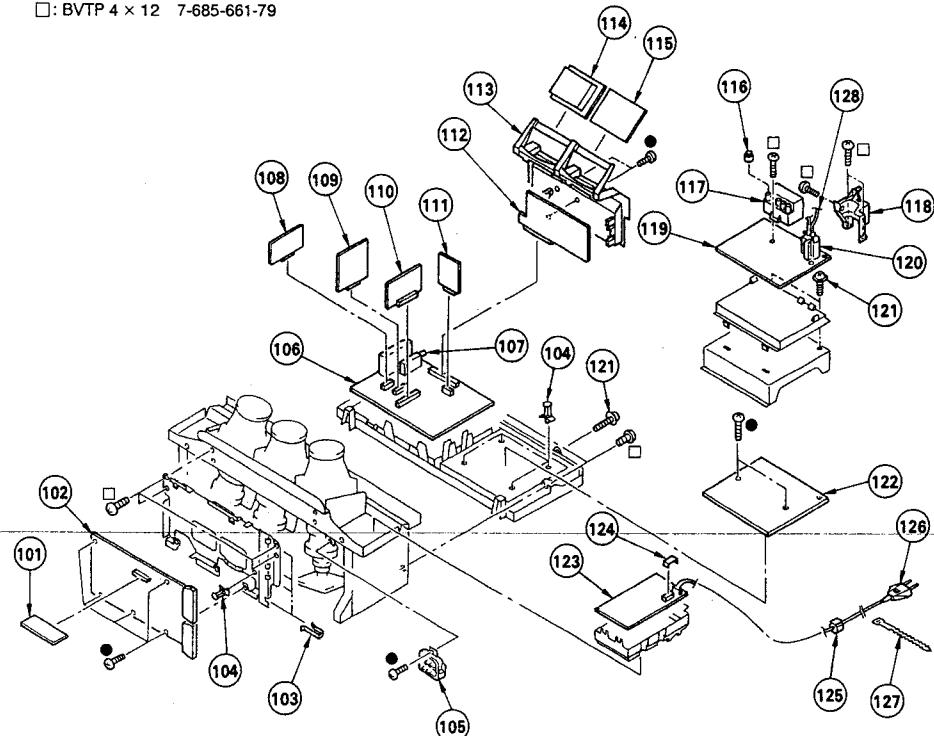
- : BVTP 4 x 12 7-685-661-79



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	X-4030-603-1	CABINET ASSY		52-57	57	4-032-343-11	CASTER
52	4-037-639-01	BRACKET, AC CORD		58	X-4030-604-1	COVER ASSY, BACK	
53	4-037-473-01	NUT, FITTING		59	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
54	4-037-472-01	LEG, ADJUSTABLE		60	4-037-534-01	MIRROR (45°), REFLECTION	
55	4-030-850-01	SOCKET, CASTER		61	4-036-462-01	MIRROR (45°), MIRROR	
56	4-378-522-01	SCREW, TAPPING, HEXAGON HEAD		62	4-378-522-21	SCREW, TAPPING, HEXAGON HEAD	

6-3. CHASSIS

●: BVTP 3 × 12 7-685-648-79
 □: BVTP 4 × 12 7-685-661-79

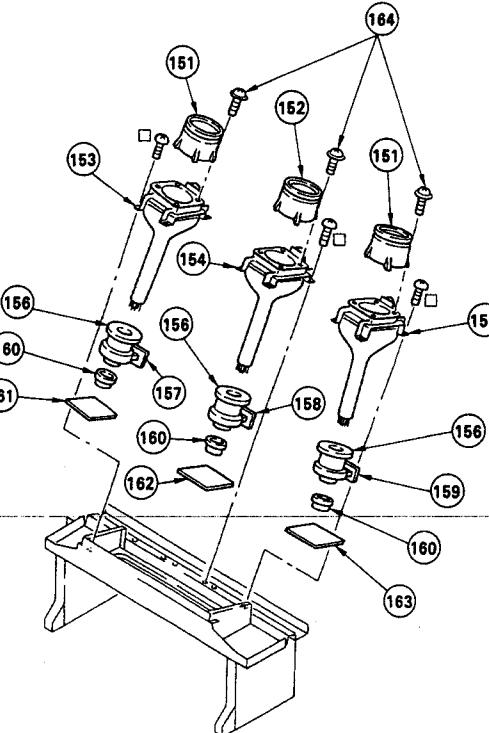


The components identified by shading and mark \triangle are critical for safety.
 Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
101	*I-644-278-12	DS BOARD	
102	*A-1341-579-A	D BOARD, COMPLETE	
103	*4-393-401-01	SPRING	
104	*3-670-570-21	SPACER, SUPPORT	
105	Δ -1-241-744-11	RESISTOR ASSY (HIGH-VOLTAGE)	
106	*A-1296-987-A	A BOARD, COMPLETE	
107	Δ -1-693-185-11	TUNER (UW916H)	
108	*A-1630-111-A	A1 BOARD, COMPLETE	
109	*A-1342-193-A	VM BOARD, COMPLETE	
110	Δ -1-131-046-A	B1 BOARD, COMPLETE	
111	Δ -1-131-046-A	C BOARD, COMPLETE	
112	*A-1388-158-A	J BOARD, COMPLETE	
113	*4-037-620-01	BRACKET, J	
114	*A-1645-024-A	V BOARD, COMPLETE	

6-4. PICTURE TUBE

□: BVTP 4 × 12 7-685-661-79



SECTION 7
ELECTRICAL PARTS LIST

B1**B1****F****A**

NOTE:

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- CAPACITORS COILS
- μF : μF , μF : μH , μH : μH

RESISTORS

- All resistors are in ohms
- F : nonflammable

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
*A-1131-046-A	B1 BOARD, COMPLETE		*****	L1302	I-408-405-00	INDUCTOR	4.7UH
C1301	I-124-478-11	ELECT	100MF 20% 25V	L1304	I-408-406-00	INDUCTOR	5.6UH
C1302	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	L1305	I-408-418-00	INDUCTOR	56UH
C1303	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	Q1301	8-729-120-28	TRANSISTOR	2SC1623-L5L6
C1304	I-124-478-11	ELECT	100MF 20% 25V	Q1302	8-729-120-28	TRANSISTOR	2SC1623-L5L6
C1305	I-124-478-11	ELECT	100MF 20% 25V	Q1305	8-729-216-22	TRANSISTOR	2SA1162-G
C1306	I-124-478-11	ELECT	100MF 20% 25V	Q1306	8-729-120-28	TRANSISTOR	2SC1623-L5L6
C1307	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	Q1307	8-729-216-22	TRANSISTOR	2SA1162-G
C1308	I-124-478-11	ELECT	100MF 20% 25V	Q1308	8-729-216-22	TRANSISTOR	2SA1162-G
C1309	I-124-910-11	ELECT	47MF 20% 50V	Q1309	8-729-216-22	TRANSISTOR	2SA1162-G
C1310	I-124-917-11	ELECT	33MF 20% 50V	Q1310	8-729-216-22	TRANSISTOR	2SA1162-G
C1311	I-163-101-00	CERAMIC CHIP	22PF 5% 50V	Q1311	8-729-216-22	TRANSISTOR	2SA1162-G
C1312	I-124-907-11	ELECT	10MF 20% 50V	Q1312	8-729-120-28	TRANSISTOR	2SC1623-L5L6
C1314	I-124-907-11	ELECT	10MF 20% 50V	JR1	I-216-295-00	METAL GLAZE	0 5% 1/10W
C1318	I-163-038-00	CERAMIC CHIP	0.1MF 25V	JR2	I-216-295-00	METAL GLAZE	0 5% 1/10W
C1319	I-163-031-11	CERAMIC CHIP	0.01MF 50V	JR3	I-216-295-00	METAL GLAZE	0 5% 1/10W
C1320	I-163-031-11	CERAMIC CHIP	0.01MF 50V	JR4	I-216-295-00	METAL GLAZE	0 5% 1/8W
C1321	I-163-101-00	CERAMIC CHIP	22PF 5% 50V	JR5	I-216-295-00	METAL GLAZE	0 5% 1/8W
C1322	I-163-101-00	CERAMIC CHIP	22PF 5% 50V	JR6	I-216-295-00	METAL GLAZE	0 5% 1/10W
C1323	I-163-109-00	CERAMIC CHIP	47PF 5% 50V	JR7	I-216-295-00	METAL GLAZE	0 5% 1/10W
C1324	I-163-133-00	CERAMIC CHIP	470PF 5% 50V	JR10	I-216-071-00	METAL GLAZE	0.2K 5% 1/10W
C1325	I-163-169-00	CERAMIC CHIP	33PF 5% 50V	R1301	I-216-071-00	METAL GLAZE	0.2K 5% 1/10W
C1327	I-163-038-00	CERAMIC CHIP	0.1MF 25V	R1302	I-216-083-00	METAL GLAZE	27K 5% 1/10W
C1333	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	R1303	I-216-051-00	METAL GLAZE	1.2K 5% 1/10W
<CONNECTOR>							
CN0302*1-573-299-11	CONNECTOR, BOARD TO BOARD 10P			R1304	I-216-043-00	METAL GLAZE	560 5% 1/10W
D1302	8-719-400-18	DIODE MA152WK		R1305	I-216-067-00	METAL GLAZE	5.6K 5% 1/10W
FL1301	I-236-620-11	FILTER, LOW PASS		R1306	I-216-049-00	METAL GLAZE	1K 5% 1/10W
FL1302	I-236-620-11	FILTER, LOW PASS		R1307	I-216-049-00	METAL GLAZE	1K 5% 1/10W
FL1303	I-236-620-11	FILTER, LOW PASS		R1308	I-216-025-00	METAL GLAZE	100 5% 1/10W
FL1304	I-236-164-11	ENCAPSULATED COMPONENT		R1310	I-216-067-00	METAL GLAZE	5.6K 5% 1/10W
<DIODE>							
IC1301	8-741-692-01	IC SBX1692-01		R1311	I-216-051-00	METAL GLAZE	1.2K 5% 1/10W
<FILTER>							
PL1301	I-236-620-11	FILTER, LOW PASS		R1312	I-216-035-00	METAL GLAZE	270 5% 1/10W
PL1302	I-236-620-11	FILTER, LOW PASS		R1313	I-216-059-00	METAL GLAZE	2.7K 5% 1/10W
PL1303	I-236-620-11	FILTER, LOW PASS		R1314	I-216-216-00	METAL GLAZE	5.6K 5% 1/8W
<IC>							
R1322	I-216-067-00	METAL GLAZE	5.6K 5% 1/10W				
R1324	I-216-049-00	METAL GLAZE	1K 5% 1/10W				
R1326	I-216-202-00	METAL GLAZE	1.5K 5% 1/8W				
R1327	I-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
R1328	I-216-043-00	METAL GLAZE	560 5% 1/10W				
<COIL>							
R1329	I-216-043-00	METAL GLAZE	560 5% 1/10W				
R1330	I-216-073-00	METAL GLAZE	10K 5% 1/10W				
R1331	I-216-069-00	METAL GLAZE	6.8K 5% 1/10W				
L1301 I-408-405-00 INDUCTOR 4.7UH							

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C239	I-137-134-91	FILM	0.22MF	5%	63V	C427	I-164-346-11	CERAMIC CHIP 1MF	16V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
C240	I-126-233-11	ELECT	22MF	20%	50V	C428	I-164-346-11	CERAMIC CHIP 1MF	16V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
C241	I-126-233-11	ELECT	22MF	20%	50V	C429	I-124-119-00	ELECT	330MF	20%	16V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
C242	I-124-903-11	ELECT	1MF	20%	50V	C501	I-126-103-11	ELECT	470MF	20%	16V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
C243	I-163-119-00	CERAMIC CHIP 120PF	5%	50V	C502	I-124-902-00	ELECT	0.47MF	20%	50V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
				C503	I-130-487-00	NYLAR	0.022MF	5%	50V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
C244	I-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	C504	I-163-031-11	CERAMIC CHIP 0.01MF	5%	50V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
C251	I-126-320-11	ELECT	10MF	20%	16V	C505	I-108-700-11	NYLAR	0.047MF	10%	200V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
C301	I-163-038-00	CERAMIC CHIP 0.1MF	25V	C506	I-102-973-00	CERAMIC	100PF	5%	50V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
C302	I-163-038-00	CERAMIC CHIP 0.1MF	25V	C508	I-102-030-00	CERAMIC	330PF	10%	500V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
C303	I-164-346-11	CERAMIC CHIP 1MF	16V	C509	I-102-030-00	CERAMIC	330PF	10%	500V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
C304	I-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C510	I-136-565-11	FILM	0.015MF	3%	1.4KV																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
C305	I-163-097-00	CERAMIC CHIP 15PF	5%	50V	C514	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C515	I-163-031-11	CERAMIC CHIP 0.01MF	50V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
C306	I-163-097-00	CERAMIC CHIP 15PF	5%	50V	C516	I-124-907-11	ELECT	10MF	20%	50V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
C307	I-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	C517	I-124-907-11	ELECT	10MF	20%	50V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
C308	I-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	C518	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C519	I-163-031-11	CERAMIC CHIP 0.01MF	50V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
C309	I-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C520	I-126-233-11	ELECT	22MF	20%	50V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
C310	I-163-038-00	CERAMIC CHIP 0.1MF	25V	C522	I-124-024-11	ELECT	33MF	160V	C523	I-108-700-11	NYLAR	0.047MF	10%	200V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
C311	I-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	C524	I-124-477-11	ELECT	47MF	20%	16V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
C312	I-124-910-11	ELECT	47MF	20%	50V	C525	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C526	I-163-031-11	CERAMIC CHIP 0.01MF	50V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
C313	I-163-077-00	CERAMIC CHIP 0.1MF	50V	C527	I-124-907-11	ELECT	10MF	20%	50V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
C314	I-163-038-00	CERAMIC CHIP 0.1MF	25V	C528	I-164-299-11	CERAMIC CHIP 0.22MF	10%	25V	C529	I-164-299-11	CERAMIC CHIP 0.22MF	10%	C530	I-164-299-11	CERAMIC CHIP 0.22MF	10%	C531	I-164-299-11	CERAMIC CHIP 0.22MF	10%	C532	I-163-125-00	CERAMIC CHIP 220PF	5%	C533	I-124-662-11	ELECT	220MF	20%	C534	I-124-662-11	ELECT	220MF	20%	C535	I-124-662-11	ELECT	220MF	20%	C536	I-124-662-11	ELECT	220MF	20%	C537	I-124-907-11	ELECT	10MF	20%	C538	I-124-907-11	ELECT	10MF	20%	C539	I-124-907-11	ELECT	10MF	20%	C540	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C541	I-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	C542	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C543	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C544	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C545	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C546	I-102-030-00	CERAMIC	330PF	10%	500V	C547	I-123-935-00	ELECT	33MF	20%	160V	C548	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C549	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C550	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C551	I-124-910-11	ELECT	47MF	20%	50V	C552	I-124-910-11	ELECT	47MF	20%	50V	C553	I-163-117-00	CERAMIC CHIP 100PF	5%	50V	C554	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C555	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C556	I-126-233-11	ELECT	22MF	20%	50V	C557	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C558	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C559	I-124-910-11	ELECT	47MF	20%	50V	C560	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C561	I-124-638-11	CERAMIC CHIP 1MF	16V	C562	I-163-038-00	CERAMIC CHIP 0.1MF	10%	25V	C563	I-163-038-00	CERAMIC CHIP 0.1MF	10%	25V	C564	I-162-638-11	CERAMIC CHIP 1MF	16V	C565	I-162-638-11	CERAMIC CHIP 1MF	16V	C566	I-126-233-11	ELECT	22MF	20%	50V	C567	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C568	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C569	I-124-907-11	ELECT	10MF	20%	50V	C570	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C571	I-163-117-00	CERAMIC CHIP 100PF	5%	50V	C572	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C573	I-124-662-11	ELECT	220MF	20%	50V	C574	I-163-117-00	CERAMIC CHIP 100PF	5%	50V	C575	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C576	I-124-910-11	ELECT	47MF	20%	50V	C577	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C578	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C579	I-124-910-11	ELECT	47MF	20%	50V	C580	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C581	I-163-031-11	CERAMIC CHIP 0.01MF	50V	C582	I-126-233-11	ELECT	22MF	20%	50V	C583	I-163-121-00	CERAMIC CHIP 150PF	5%	50V	C584	I-163-063-00	CERAMIC CHIP 0.022MF	10%	50V	C585	I-124-903-11	ELECT	1MF	20%	50V	C586	I-163-063-00	CERAMIC CHIP 0.022MF	10%	50V	C587	I-124-903-11	ELECT	1MF	20%	50V	C588	I-164-346-11	CERAMIC CHIP 1MF	16V	C589	I-126-233-11	ELECT	22MF	20%	50V	C590	I-126-233-11	ELECT	22MF	20%	50V	C591	I-124-925-11	ELECT	2.2MF	20%	50V	C592	I-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	C593	I-164-182-11	CERAMIC CHIP 0.0033MF	10%	50V	C594	I-163-117-00	CERAMIC CHIP 100PF	5%	50V	C595	I-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	C596	I-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	C597	I-126-101-11	ELECT	100MF	20%	16V	C598	I-126-101-11	ELECT	100MF	20%	16V	C599	I-124-478-11	ELECT	100MF	20%	16V	C600	I-124-122-11	ELECT	100MF	20%	16V	C601	I-126-233-11	ELECT	22MF	20%	50V	C602	I-124-902-00	CERAMIC	0.47MF	20%	50V	C603	I-124-902-00	CERAMIC	0.47MF	20%	50V	C604	I-124-902-00	CERAMIC	0.47MF	20%	50V	C605	I-124-902-00	CERAMIC	0.47MF	20%	50V	C606	I-124-902-00	CERAMIC	0.47MF	20%	50V	C607	I-124-902-00	CERAMIC	0.47MF	20%	50V	C608	I-124-902-00	CERAMIC	0.47MF	20%	50V	C609	I-124-902-00	CERAMIC	0.47MF	20%	50V	C610	I-124-902-00	CERAMIC	0.47MF	20%	50V	C611	I-124-902-00	CERAMIC	0.47MF	20%	50V	C612	I-124-902-00	CERAMIC	0.47MF	20%	50V	C613	I-124-902-00	CERAMIC	0.47MF	20%	50V	C614	I-124-902-00	CERAMIC	0.47MF	20%	50V	C615	I-124-902-00	CERAMIC	0.47MF	20%	50V	C616	I-124-902-00	CERAMIC	0.47MF	20%	50V	C617	I-124-902-00	CERAMIC	0.47MF	20%	50V	C618	I-124-902-00	CERAMIC	0.47MF	20%	50V	C619	I-124-902-00	CERAMIC	0.47MF	20%	50V	C620	I-124-902-00	CERAMIC	0.47MF	20%	50V	C621	I-124-902-00	CERAMIC	0.47MF	20%	50V	C622	I-124-902-00	CERAMIC	0.47MF	20%	50V	C623	I-124-902-00	CERAMIC	0.47MF	20%	50V	C624	I-124-902-00	CERAMIC	0.47MF	20%	50V	C625	I-124-902-00	CERAMIC	0.47MF	20%	50V	C626	I-124-902-00	CERAMIC	0.47MF	20%	50V	C627	I-124-902-00	CERAMIC	0.47MF	20%	50V	C628	I-124-902-00	CERAMIC	0.47MF	20%	50V	C629	I-124-902-00	CERAMIC	0.47MF	20%	50V	C630	I-124-902-00	CERAMIC	0.47MF	20%	50V	C631	I-124-902-00	CERAMIC	0.47MF	20%	50V	C632	I-124-902-00	CERAMIC	0.47MF	20%	50V	C633	I-124-902-00	CERAMIC	0.47MF	20%	50V	C634	I-124-902-00	CERAMIC	0.47MF	20%	50V	C635	I-124-902-00	CERAMIC	0.47MF	20%	50V	C636	I-124-902-00	CERAMIC	0.47MF	20%	50V	C637	I-124-902-00	CERAMIC	0.47MF	20%	50V	C638	I-124-902-00	CERAMIC	0.47MF	20%	50V	C639	I-124-902-00	CERAMIC	0.47MF	20%	50V	C640	I-124-902-00	CERAMIC	0.47MF	20%	50V	C641	I-124-902-00	CERAMIC	0.47MF	20%	50V	C642	I-124-902-00	CERAMIC	0.47MF	20%	50V	C643	I-124-902-00	CERAMIC	0.47MF	20%	50V	C644	I-124-902-00	CERAMIC	0.47MF	20%	50V	C645	I-124-902-00	CERAMIC	0.47MF	20%	50V	C646	I-124-902-00	CERAMIC	0.47MF	20%	50V	C647	I-124-902-00	CERAMIC	0.47MF	20%	50V	C648	I-124-902-00	CERAMIC	0.47MF	20%	50V	C649	I-124-902-00	CERAMIC	0.47MF	20%	50V	C650	I-124-902-00	CERAMIC	0.47MF	20%	50V	C651	I-124-902-00	CERAMIC	0.47MF	20%	50V	C652	I-124-902-00	CERAMIC	0.47MF	20%	50V	C653	I-124-902-00	CERAMIC	0.47MF	20%	50V	C654	I-124-902-00	CERAMIC	0.47MF	20%	50V	C655	I-124-902-00	CERAMIC	0.47MF	20%	50V	C656	I-124-902-00	CERAMIC	0.47MF	20%	50V	C657	I-124-902-00	CERAMIC	0.47MF	20%	50V	C658	I-124-902-00	CERAMIC	0.47MF	20%	50V	C659	I-124-902-00	CERAMIC	0.47MF	20%	50V	C660	I-124-902-00	CERAMIC	0.47MF	20%	50V	C661	I-124-902-00	CERAMIC	0.47MF	20%	50V	C662	I-124-902-00	CERAMIC	0.47MF	20%	50V	C663	I-124-902-00	CERAMIC	0.47MF	20%	50V	C664	I-124-902-00	CERAMIC	0.47MF	20%	50V	C665	I-124-902-00	CERAMIC	0.47MF	20%	50V	C666	I-124-902-00	CERAMIC	0.47MF	20%	50V	C667	I-124-902-00	CERAMIC	0.47MF	20%	50V	C668	I-124-902-00	CERAMIC	0.47MF	20%	50V	C669	I-124-902-00	CERAMIC	0.47MF	20%	50V	C670	I-124-902-00	CERAMIC	0.47MF	20%	50V	C671	I-124-902-00	CERAMIC	0.47MF	20%	50V	C672	I-124-902-00	CERAMIC	0.47MF	20%	50V	C673	I-124-902-00	CERAMIC	0.47MF	20%	50V	C674	I-124-902-00	CERAMIC	0.47MF	20%	50V	C675	I-124-902-00	CERAMIC	0.47MF	20%	50V	C676	I-124-902-00	CERAMIC	0.47MF	20%	50V	C677	I-124-902-00	CERAMIC	0.47MF	20%	50V	C678	I-124-902-00	CERAMIC	0.47MF	20%	50V	C679	I-124-902-00	CERAMIC	0.47MF	20%	50V	C680	I-124-902-00	CERAMIC	0.47MF	20%	50V	C681	I-

A

A

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
L444	1-410-476-11	INDUCTOR 33UH		Q581	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR57	1-216-295-00	METAL GLAZE 0 5%	1/10W	R211	I-247-739-11	CARBON 100 5%	1/2W
L501	1-460-196-11	COIL, HORIZONTAL LINEARITY		Q582	8-729-216-22	TRANSISTOR 2SA1162-G		JR58	1-216-295-00	METAL GLAZE 0 5%	1/8W	R212	I-216-049-00	METAL GLAZE 1K 5%	1/10W
L502	1-410-645-31	INDUCTOR 100UH		Q610	8-729-140-97	TRANSISTOR 2SB734-34		JR59	1-216-295-00	METAL GLAZE 0 5%	1/10W	R213	I-216-073-00	METAL GLAZE 10K 5%	1/10W
L503	1-408-420-00	INDUCTOR 82UH		Q611	8-729-900-53	TRANSISTOR DTC114EK		JR60	1-216-295-00	METAL GLAZE 0 5%	1/10W	R214	I-216-049-00	METAL GLAZE 1K 5%	1/10W
L504	1-412-546-21	INDUCTOR 560UH		Q612	8-729-216-22	TRANSISTOR 2SA1162-G		JR61	1-216-295-00	METAL GLAZE 0 5%	1/10W	R215	I-216-073-00	METAL GLAZE 10K 5%	1/10W
L505	1-459-313-00	COIL WITH CORE (HWC)						JR62	1-216-295-00	METAL GLAZE 0 5%	1/8W	R216	I-216-049-00	METAL GLAZE 1K 5%	1/10W
L507	1-459-313-00	COIL WITH CORE (HWC)						JR63	1-216-295-00	METAL GLAZE 0 5%	1/8W	R217	I-216-043-00	METAL GLAZE 560 5%	1/10W
L508	1-412-546-21	INDUCTOR 560UH						JR64	1-216-295-00	METAL GLAZE 0 5%	1/10W	R218	I-216-081-00	METAL GLAZE 22K 5%	1/10W
L610	1-412-539-21	INDUCTOR 150UH						JR65	1-216-295-00	METAL GLAZE 0 5%	1/8W	R221	I-212-849-00	FUSIBLE 4.7 5%	1/4W F
L611	1-412-539-21	INDUCTOR 150UH						JR66	1-216-295-00	METAL GLAZE 0 5%	1/10W	R222	I-216-049-00	METAL GLAZE 1K 5%	1/10W
								JR67	1-216-295-00	METAL GLAZE 0 5%	1/8W	R224	I-216-081-00	METAL GLAZE 22K 5%	1/10W
								JR68	1-216-295-00	METAL GLAZE 0 5%	1/8W	R225	I-212-849-00	FUSIBLE 4.7 5%	1/4W F
								JR69	1-216-295-00	METAL GLAZE 0 5%	1/8W	R226	I-216-039-00	METAL GLAZE 390 5%	1/10W
								JR70	1-216-295-00	METAL GLAZE 0 5%	1/8W	R227	I-216-081-00	METAL GLAZE 22K 5%	1/10W
								JR71	1-216-295-00	METAL GLAZE 0 5%	1/8W	R228	I-216-081-00	METAL GLAZE 22K 5%	1/10W
Q071	8-729-901-05	TRANSISTOR DTA124EK		JR6	1-216-295-00	METAL GLAZE 0 5%	1/10W								
Q101	8-729-216-22	TRANSISTOR 2SA1162-G		JR7	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR72	1-216-295-00	METAL GLAZE 0 5%	1/10W	R229	I-216-039-00	METAL GLAZE 390 5%	1/10W
Q102	8-729-901-00	TRANSISTOR DTC124EK		JR8	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR73	1-216-295-00	METAL GLAZE 0 5%	1/8W	R230	I-216-097-00	METAL GLAZE 10K 5%	1/10W
Q103	8-729-901-06	TRANSISTOR DTA144EK		JR9	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR74	1-216-295-00	METAL GLAZE 0 5%	1/8W	R231	I-216-097-00	METAL GLAZE 100K 5%	1/10W
Q201	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR10	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR75	1-216-295-00	METAL GLAZE 0 5%	1/8W	R232	I-216-081-00	METAL GLAZE 22K 5%	1/10W
Q202	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR11	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR76	1-216-295-00	METAL GLAZE 0 5%	1/8W	R233	I-216-071-00	METAL GLAZE 8.2K 5%	1/10W
Q203	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR12	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR77	1-216-295-00	METAL GLAZE 0 5%	1/10W	R234	I-216-069-00	METAL GLAZE 6.8K 5%	1/10W
Q204	8-729-216-22	TRANSISTOR 2SA1162-G		JR13	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR78	1-216-295-00	METAL GLAZE 0 5%	1/8W	R235	I-216-073-00	METAL GLAZE 10K 5%	1/10W
Q205	8-729-216-22	TRANSISTOR 2SA1162-G		JR14	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR79	1-216-295-00	METAL GLAZE 0 5%	1/8W	R236	I-216-081-00	METAL GLAZE 22K 5%	1/10W
Q206	8-729-216-22	TRANSISTOR 2SA1162-G		JR15	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR80	1-216-295-00	METAL GLAZE 0 5%	1/8W	R237	I-216-025-00	METAL GLAZE 100 5%	1/10W
Q207	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR16	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR81	1-216-295-00	METAL GLAZE 0 5%	1/8W	R238	I-216-025-00	METAL GLAZE 100 5%	1/10W
Q209	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR17	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR82	1-216-295-00	METAL GLAZE 0 5%	1/8W				
Q301	8-729-901-00	TRANSISTOR DTC124EK		JR18	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR83	1-216-295-00	METAL GLAZE 0 5%	1/10W	R240	I-216-089-00	METAL GLAZE 47K 5%	1/10W
Q302	8-729-216-22	TRANSISTOR 2SA1162-G		JR19	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR84	1-216-295-00	METAL GLAZE 0 5%	1/10W	R241	I-216-057-00	METAL GLAZE 2.2K 5%	1/10W
Q303	8-729-216-22	TRANSISTOR 2SA1162-G		JR20	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR85	1-216-295-00	METAL GLAZE 0 5%	1/10W	R242	I-216-218-00	METAL GLAZE 6.8K 5%	1/8W
Q304	8-729-900-53	TRANSISTOR DTC114EK		JR21	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR86	1-216-295-00	METAL GLAZE 0 5%	1/8W	R243	I-216-091-00	METAL GLAZE 56K 5%	1/10W
Q305	8-729-901-01	TRANSISTOR DTC144EK		JR22	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR87	1-216-295-00	METAL GLAZE 0 5%	1/10W				
Q306	8-729-216-22	TRANSISTOR 2SA1162-G		JR23	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR88	1-216-295-00	METAL GLAZE 0 5%	1/8W	R244	I-216-089-00	METAL GLAZE 47K 5%	1/10W
Q308	8-729-216-22	TRANSISTOR 2SA1162-G		JR24	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR89	1-216-295-00	METAL GLAZE 0 5%	1/10W	R245	I-216-089-00	METAL GLAZE 47K 5%	1/10W
Q309	8-729-931-02	TRANSISTOR 2SC2413K-Q		JR25	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR90	1-216-295-00	METAL GLAZE 0 5%	1/8W	R247	I-216-073-00	METAL GLAZE 10K 5%	1/10W
Q310	8-729-901-00	TRANSISTOR DTC124EK		JR26	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR91	1-216-295-00	METAL GLAZE 0 5%	1/10W	R248	I-216-073-00	METAL GLAZE 10K 5%	1/10W
Q311	8-729-901-06	TRANSISTOR DTA144EK		JR27	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR92	1-216-295-00	METAL GLAZE 0 5%	1/8W	R250	I-216-095-00	METAL GLAZE 82K 5%	1/10W
Q312	8-729-900-53	TRANSISTOR DTC114EK		JR28	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR93	1-216-295-00	METAL GLAZE 0 5%	1/10W	R251	I-216-065-00	METAL GLAZE 4.7K 5%	1/10W
Q401	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR29	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR100	1-216-295-00	METAL GLAZE 0 5%	1/10W	R252	I-216-073-00	METAL GLAZE 10K 5%	1/10W
Q402	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR30	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR110	1-216-295-00	METAL GLAZE 0 5%	1/10W	R253	I-216-073-00	METAL GLAZE 10K 5%	1/10W
Q403	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR31	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR124	1-216-295-00	METAL GLAZE 0 5%	1/10W	R254	I-216-252-00	METAL GLAZE 180K 5%	1/10W
Q404	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR32	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR234	1-216-295-00	METAL GLAZE 0 5%	1/10W	R255	I-216-252-00	METAL GLAZE 180K 5%	1/10W
Q444	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR33	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR234	1-216-295-00	METAL GLAZE 0 5%	1/10W	R256	I-216-182-00	METAL GLAZE 220 5%	1/8W
Q445	8-729-216-22	TRANSISTOR 2SA1162-G		JR34	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR234	1-216-295-00	METAL GLAZE 0 5%	1/10W	R257	I-216-182-00	METAL GLAZE 220 5%	1/8W
Q501	8-729-119-80	TRANSISTOR 2SC2688-LK		JR35	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR271	1-216-295-00	METAL GLAZE 0 5%	1/10W	R258	I-216-049-00	METAL GLAZE 1K 5%	1/10W
Q502	8-729-014-88	TRANSISTOR 2SC4891-CA		JR36	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR272	1-216-198-00	METAL GLAZE 1K 5%	1/8W	R260	I-216-049-00	METAL GLAZE 1K 5%	1/10W
Q503	8-729-216-22	TRANSISTOR 2SA1162-G		JR38	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR273	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R261	I-216-009-00	METAL GLAZE 22 5%	1/10W
Q504	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR39	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR274	1-216-057-00	METAL GLAZE 100 5%	1/10W	R262	I-216-029-00	METAL GLAZE 150 5%	1/8W
Q505	8-729-201-32	TRANSISTOR 2SA1013-0		JR40	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR275	1-216-025-00	METAL GLAZE 100 5%	1/10W	R263	I-216-178-00	METAL GLAZE 150 5%	1/8W
Q506	8-729-201-32	TRANSISTOR 2SA1013-0		JR41	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR276	1-216-057-00	METAL GLAZE 100 5%	1/10W	R264	I-216-174-00	METAL GLAZE 100 5%	1/8W
Q507	8-729-304-92	TRANSISTOR 2SB649A-C		JR42	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR277	1-216-025-00	METAL GLAZE 100 5%	1/10W	R265	I-216-049-00	METAL GLAZE 1K 5%	1/10W
Q508	8-729-204-16	TRANSISTOR 2SA1301-0		JR43	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR278	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W	R266	I-216-009-00	METAL GLAZE 22 5%	1/10W
Q509	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR44	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR279	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R267	I-216-035-00	METAL GLAZE 150 5%	1/8W
Q510	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR45	1-216-295-00	METAL GLAZE 0 5%	1/10W	JR280	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W	R268	I-216-174-00	METAL GLAZE 100 5%	1/8W
Q511	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR46	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR281	1-216-230-00	METAL GLAZE 22K 5%	1/8W	R269	I-216-174-00	METAL GLAZE 100 5%	1/8W
Q512	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR47	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR282	1-216-653-11	METAL CHIP 1.2K 0.50%	1/10W	R270	I-216-035-00	METAL GLAZE 270 5%	1/10W
Q515	8-729-216-22	TRANSISTOR 2SA1162-G		JR48	1-216-295-00	METAL GLAZE 0 5%	1/8W	JR283	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W	R271	I-216-075-00	METAL GLAZE 12K 5%	1/10W
Q516	8-729-216-22	TRANSISTOR 2SA1162-G		J											

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
R317	I-216-073-00	METAL GLAZE	10K 5% 1/10W	R413	I-216-171-00	METAL GLAZE	75 5% 1/8W	R556	I-216-033-00	METAL GLAZE	220 5% 1/10W	R644	I-215-912-11	METAL OXIDE	150 5% 3W F				
R319	I-216-029-00	METAL GLAZE	150 5% 1/10W	R414	I-216-171-00	METAL GLAZE	75 5% 1/8W	R558	I-249-385-11	CARBON	2.2 5% 1/4W F	R645	I-215-887-00	METAL OXIDE	150 5% 2W F				
R320	I-216-174-00	METAL GLAZE	100 5% 1/8W	R416	I-216-113-00	METAL GLAZE	470K 5% 1/10W	R563	I-216-097-00	METAL GLAZE	100K 5% 1/10W	R646	I-215-973-00	METAL GLAZE	10K 5% 1/10W				
R321	I-216-039-00	METAL GLAZE	390 5% 1/10W	R417	I-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R564	I-216-073-00	METAL GLAZE	10K 5% 1/10W	R645	I-215-912-11	METAL OXIDE	150 5% 3W F				
R324	I-216-049-00	METAL GLAZE	1K 5% 1/10W	R419	I-216-113-00	METAL GLAZE	470K 5% 1/10W	R565	I-216-055-00	METAL GLAZE	1.8K 5% 1/10W	R646	I-216-073-00	METAL GLAZE	10K 5% 1/10W				
R325	I-216-047-00	METAL GLAZE	820 5% 1/10W	R420	I-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R566	I-216-045-00	METAL GLAZE	680 5% 1/10W	R650	I-216-055-00	METAL GLAZE	1.8K 5% 1/10W				
R326	I-216-073-00	METAL GLAZE	10K 5% 1/10W	R423	I-216-015-00	METAL GLAZE	39 5% 1/10W	R567	I-216-045-00	METAL GLAZE	680 5% 1/10W	R651	I-216-055-00	METAL GLAZE	1.8K 5% 1/10W				
R328	I-216-029-00	METAL GLAZE	150 5% 1/10W	R424	I-216-025-00	METAL GLAZE	100 5% 1/10W	R568	I-216-045-00	METAL GLAZE	680 5% 1/10W	R653	I-216-081-00	METAL GLAZE	22K 5% 1/10W				
R329	I-216-023-00	METAL GLAZE	82 5% 1/10W	R425	I-216-025-00	METAL GLAZE	100 5% 1/10W	R569	I-216-055-00	METAL GLAZE	1.8K 5% 1/10W	R654	I-216-081-00	METAL GLAZE	22K 5% 1/10W				
R330	I-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R426	I-216-025-00	METAL GLAZE	100 5% 1/10W	R570	I-216-009-00	METAL GLAZE	22 5% 1/10W	R655	I-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R331	I-216-097-00	METAL GLAZE	100K 5% 1/10W	R427	I-216-025-00	METAL GLAZE	100 5% 1/10W	R571	I-216-009-00	METAL GLAZE	22 5% 1/10W	R1520	I-249-429-11	CARBON	10K 5% 1/4W				
R333	I-216-182-00	METAL GLAZE	220 5% 1/8W	R428	I-249-393-11	CARBON	10 5% 1/4W F	R572	I-216-049-00	METAL GLAZE	1K 5% 1/10W	<TRANSFORMER>							
R334	I-216-182-00	METAL GLAZE	220 5% 1/8W	R446	I-216-045-00	METAL GLAZE	680 5% 1/10W	R573	I-216-073-00	METAL GLAZE	10K 5% 1/10W	T501	I-439-545-11	TRANSFORMER, FERRITE					
R335	I-216-025-00	METAL GLAZE	100 5% 1/10W	R447	I-216-049-00	METAL GLAZE	1K 5% 1/10W	R574	I-216-041-00	METAL GLAZE	470 5% 1/10W	T502	I-437-078-11	TRANSFORMER, HORIZONTAL DRIVE					
R336	I-216-295-00	METAL GLAZE	0 5% 1/10W	R501	I-247-895-00	CARBON	470K 5% 1/4W	R575	I-216-037-00	METAL GLAZE	330 5% 1/10W								
R337	I-216-295-00	METAL GLAZE	0 5% 1/10W	R502	I-249-377-11	CARBON	0.47 5% 1/4W F	R576	I-216-025-00	METAL GLAZE	100 5% 1/10W								
R338	I-216-295-00	METAL GLAZE	0 5% 1/10W	R503	I-249-377-11	CARBON	0.47 5% 1/4W F	R577	I-216-025-00	METAL GLAZE	100 5% 1/10W								
R339	I-216-025-00	METAL GLAZE	100 5% 1/10W	R504	I-249-417-11	CARBON	1K 5% 1/4W	R579	I-216-069-00	METAL GLAZE	6.8K 5% 1/10W								
R340	I-216-025-00	METAL GLAZE	100 5% 1/10W	R505	I-249-423-11	CARBON	3.3K 5% 1/4W	R581	I-216-033-00	METAL GLAZE	220 5% 1/10W								
R341	I-216-025-00	METAL GLAZE	100 5% 1/10W	R506	I-215-920-11	METAL OXIDE	3.3K 5% 3W F	R582	I-216-037-00	METAL GLAZE	330 5% 1/10W								
R342	I-216-033-00	METAL GLAZE	220 5% 1/10W	R507	I-249-429-11	CARBON	10K 5% 1/4W F	R583	I-216-055-00	METAL GLAZE	1.8K 5% 1/10W	TU101	I-693-185-11	TUNER (UV916H)					
R343	I-216-022-00	METAL GLAZE	75 5% 1/10W	R508	I-216-373-11	METAL OXIDE	2.2 5% 2W F	R584	I-216-039-00	METAL GLAZE	390 5% 1/10W								
R344	I-216-022-00	METAL GLAZE	75 5% 1/10W	R509	I-216-478-11	METAL OXIDE	390 5% 3W F	R586	I-216-053-00	METAL GLAZE	1.5K 5% 1/10W								
R345	I-216-022-00	METAL GLAZE	75 5% 1/10W	R510	I-216-073-00	METAL GLAZE	10K 5% 1/10W	R587	I-216-045-00	METAL GLAZE	680 5% 1/10W								
R346	I-216-022-00	METAL GLAZE	75 5% 1/10W	R511	I-249-407-11	CARBON	150 5% 1/4W	R588	I-216-101-00	METAL GLAZE	150 5% 1/10W								
R347	I-216-083-00	METAL GLAZE	27K 5% 1/10W	R512	I-216-073-00	METAL GLAZE	10K 5% 1/10W	R589	I-216-073-00	METAL GLAZE	10K 5% 1/10W	X301	I-567-504-11	OSCILLATOR, CRYSTAL					
R348	I-216-029-00	METAL GLAZE	150 5% 1/10W	R513	I-216-049-00	METAL GLAZE	1K 5% 1/10W	R590	I-216-049-00	METAL GLAZE	1K 5% 1/10W	X302	I-567-505-11	OSCILLATOR, CRYSTAL					
R349	I-216-020-00	METAL GLAZE	62 5% 1/10W	R514	I-216-441-00	METAL OXIDE	27K 5% 1W F	R591	I-216-073-00	METAL GLAZE	10K 5% 1/10W	X501	I-577-099-11	VIBRATOR, CERAMIC					
R350	I-216-029-00	METAL GLAZE	150 5% 1/10W	R515	I-249-432-11	CARBON	18K 5% 1/4W F	R592	I-216-083-00	METAL GLAZE	27K 5% 1/10W	*****							
R351	I-216-073-00	METAL GLAZE	10K 5% 1/10W	R516	I-249-417-11	CARBON	1K 5% 1/4W F	R593	I-216-063-00	METAL GLAZE	3.9K 5% 1/10W	1-466-735-11	IF BLOCK (IPH-389P)	*****					
R352	I-216-033-00	METAL GLAZE	220 5% 1/10W	R517	I-249-427-11	CARBON	6.8K 5% 1/4W F	R594	I-216-053-00	METAL GLAZE	1.5K 5% 1/10W								
R354	I-216-033-00	METAL GLAZE	220 5% 1/10W	R518	I-249-422-11	CARBON	2.7K 5% 1/4W F	R595	I-216-643-11	METAL CHIP	470 0.50K 1/10W	<CAPACITOR>							
R355	I-216-033-00	METAL GLAZE	220 5% 1/10W	R519	I-249-417-11	CARBON	1K 5% 1/4W F	R596	I-216-670-11	METAL CHIP	6.2K 0.50K 1/10W	C1	I-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V				
R356	I-216-033-00	METAL GLAZE	220 5% 1/10W	R520	I-215-925-11	METAL OXIDE	22K 5% 3W F	R597	I-216-081-00	METAL GLAZE	22K 5% 1/10W	C2	I-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
R357	I-216-041-00	METAL GLAZE	470 5% 1/10W	R521	I-215-925-11	METAL OXIDE	22K 5% 3W F	R600	I-216-190-00	METAL GLAZE	470 5% 1/8W	C3	I-124-903-11	ELECT 1MF	20% 50V				
R358	I-216-031-00	METAL GLAZE	180 5% 1/10W	R522	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R606	I-216-049-00	METAL GLAZE	1K 5% 1/10W	C4	I-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
R359	I-216-033-00	METAL GLAZE	220 5% 1/10W	R523	I-216-083-00	METAL GLAZE	27K 5% 1/10W	R609	I-216-689-11	METAL GLAZE	39K 5% 1/10W	C5	I-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
R360	I-216-033-00	METAL GLAZE	220 5% 1/10W	R524	I-216-083-00	METAL GLAZE	27K 5% 1/10W	R610	I-216-049-00	METAL GLAZE	1K 5% 1/10W	R611	I-216-295-00	METAL GLAZE	0 5% 1/10W	C6	I-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
R361	I-216-033-00	METAL GLAZE	220 5% 1/10W	R525	I-216-097-00	METAL GLAZE	100K 5% 1/10W	R613	I-216-049-00	METAL GLAZE	1K 5% 1/10W	C7	I-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
R362	I-216-077-00	METAL GLAZE	15K 5% 1/10W	R526	I-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R614	I-216-399-00	METAL OXIDE	6.8 5% 3W F	C8	I-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V				
R365	I-216-073-00	METAL GLAZE	10K 5% 1/10W	R527	I-249-429-11	CARBON	10K 5% 1/4W F	R615	I-216-474-11	METAL OXIDE	82 5% 3W F	C9	I-124-903-11	ELECT 22MF	20% 25V				
R366	I-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R528	I-216-049-00	METAL GLAZE	1K 5% 1/10W	R616	I-216-035-00	METAL GLAZE	270 5% 1/10W	C10	I-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
R367	I-216-198-00	METAL GLAZE	1K 5% 1/8W	R531	I-216-077-00	METAL GLAZE	15K 5% 1/10W	R617	I-216-400-11	METAL OXIDE	8.2 5% 3W F	C11	I-124-477-11	ELECT 47MF	20% 16V				
R368	I-216-033-00	METAL GLAZE	220 5% 1/10W	R532	I-249-385-11	CARBON	2.2 5% 1/4W F	R618	I-216-061-00	METAL GLAZE	3.3K 5% 1/10W	C13	I-163-081-00	CERAMIC CHIP 0.01MF	10% 50V				
R369	I-216-033-00	METAL GLAZE	220 5% 1/10W	R533	I-216-039-00	METAL GLAZE	220 5% 1/10W	R620	I-216-073-00	METAL GLAZE	10K 5% 1/10W	C14	I-124-477-11	ELECT 47MF	20% 16V				
R370	I-216-033-00	METAL GLAZE	220 5% 1/10W	R536	I-216-476-11	METAL OXIDE	180 5% 3W F	R621	I-216-399-00	METAL GLAZE	6.8 5% 3W F	C15	I-124-903-11	ELECT 1MF	20% 50V				
R371	I-216-033-00	METAL GLAZE	220 5% 1/10W	R537	I-216-476-11	METAL OXIDE	180 5% 3W F	R622	I-216-474-11	METAL OXIDE	82 5% 3W F	C16	I-163-061-00	CERAMIC CHIP 0.015MF	10% 50V				
R372	I-216-017-00	METAL GLAZE	47 5% 1/10W	R540	I-216-049-00	METAL GLAZE	1K 5% 1/10W	R623	I-216-400-11	METAL OXIDE	8.2 5% 3W F	C17	I-162-638-11	CERAMIC CHIP 1MF	16V				
R373	I-216-017-00	METAL GLAZE	47 5% 1/10W	R541	I-216-081-00	METAL GLAZE	22K 5% 1/10W	R624	I-216-073-00	METAL GLAZE	10K 5% 1/10W	C18	I-162-638-11	CERAMIC CHIP 1MF	16V				
R376	I-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R542	I-216-081-00	METAL GLAZE	22K 5% 1/10W	R625	I-216-081-00	METAL GLAZE	22K 5% 1/10W	C19	I-163-141-00	CERAMIC CHIP 0.001MF	5% 50V				
R377	I-216-051-00	METAL GLAZE	1.2K 5% 1/10W	R543	I-216-049-00	METAL GLAZE	1K 5% 1/10W	R626	I-216-033-00	METAL GLAZE	220 5% 1/10W	C20	I-124-902-00	ELECT 0.47MF	20% 50V				
R378	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R544	I-216-049-00	METAL GLAZE	1K 5% 1/10W	R627	I-216-033-00	METAL GLAZE	220 5% 1/10W	C21	I-124-903-11	ELECT 1MF	20% 50V				
R379	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R545	I-216-049-00	METAL GLAZE	1K 5% 1/10W	R628	I-215-866-11	METAL OXIDE	330 5% 1W F	C22	I-162-232-11	CERAMIC CHIP 0.01MF	10% 50V				
R380	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R546	I-216-083-00	METAL GLAZE	27K 5% 1/10W	R629	I-216-488-11	METAL OXIDE	180 5% 3W F	C23	I-124-902-00	ELECT 0.47MF	20% 50V				
R401	I-216-171-00	METAL GLAZE	75 5% 1/8W	R547	I-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R631	I-216-055-00	METAL GLAZE	1.8K 5% 1/10W	C24</							

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REF. NO.	PART NO.	DESCRIPTION	REMARK
CN1627*	J-564-512-11	PLUG, CONNECTOR 9P	
CN1628*	J-568-881-51	PIN, CONNECTOR 6P	
CN1650*	J-568-878-51	PIN, CONNECTOR 3P	
CN1651*	J-568-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CN1652*	J-564-511-51	PLUG, CONNECTOR 8P	

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

CN1653* J-568-879-81 PIN, CONNECTOR 4P
CN1654* J-564-508-11 PLUG, CONNECTOR 5P
CN1655* J-508-786-00 PIN, CONNECTOR (5MM PITCH) 2P
CN1656* J-508-786-00 PIN, CONNECTOR (5MM PITCH) 2P

<DIODE>

D602	8-719-979-58	DIODE EGP10D	L607	1-408-404-00	INDUCTOR	3.9UH
D603	8-719-500-67	DIODE D5K40H	L610	1-424-602-11	COIL, CHOKE	800UH
D604	8-719-510-09	DIODE D10SC6M	L611	1-412-546-41	INDUCTOR	560UH
D605	8-719-988-31	DIODE D10SC6MR	L612	1-412-540-41	INDUCTOR	180UH
D607	8-719-025-81	DIODE S3V10SB	L613	1-412-522-21	INDUCTOR	5.6UH

D608	8-719-109-85	DIODE RD5.1ES-B2	Q603	8-729-011-15	TRANSISTOR 2SC4582NP	
D609	8-719-921-42	DIODE MTZJ-5,1A	Q607	8-729-802-84	TRANSISTOR 2SC1755-D	
D610	8-719-979-58	DIODE EGP10D	Q608	8-729-906-39	TRANSISTOR 2SC3271-P	
D611	8-719-979-58	DIODE EGP10D	Q609	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D613	8-719-303-57	DIODE RU2AM	Q610	8-729-820-82	TRANSISTOR 2SA1208-S	

D614	8-719-979-58	DIODE EGP10D	Q611	8-729-820-82	TRANSISTOR 2SA1208-S	
D615	8-719-975-76	DIODE SB-140	Q612	8-729-386-12	TRANSISTOR 2SS8861-C	
D616	8-719-025-81	DIODE S3V10SB	Q613	8-729-209-15	TRANSISTOR 2SD2012	
D617	8-719-110-03	DIODE RD7.5ES-B2	Q614	8-729-011-15	TRANSISTOR 2SC4582NP	
D618	8-719-911-19	DIODE ISS119	Q615	8-729-820-82	TRANSISTOR 2SA1208-S	

D619	8-719-975-76	DIODE SB-140	Q616	8-729-208-39	TRANSISTOR 2SA1306A-Y	
D620	Δ 8-719-988-31	DIODE D10SC6MR	Q617	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D621	8-719-911-55	DIODE U05G	Q618	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D622	8-719-911-55	DIODE U05G	Q619	8-729-103-80	TRANSISTOR 2SA1261-K	
D623	8-719-922-18	DIODE MTZJ-24C	Q620	8-729-378-84	TRANSISTOR 2SD788-5	

D624	8-719-109-89	DIODE RD5.6ES-B2	Q621	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D625	8-719-911-55	DIODE U05G	Q622	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D626	8-719-110-49	DIODE RD18ES-B2	Q623	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D629	8-719-911-19	DIODE ISS119	Q624	8-729-103-80	TRANSISTOR 2SA1261-K	
D630	Δ 8-719-510-09	DIODE D10SC6M	Q625	8-729-255-12	TRANSISTOR 2SC2551-0	

D631	Δ 8-719-988-31	DIODE D10SC6MR	Q626	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D632	8-719-500-67	DIODE D5K40H	Q627	8-729-378-84	TRANSISTOR 2SD788-5	
D633	8-719-903-61	DIODE SLP361B	Q628	8-729-255-12	TRANSISTOR 2SC2551-0	
D634	8-719-911-19	DIODE ISS119	Q629	8-729-255-12	TRANSISTOR 2SC2551-0	
D636	8-719-109-85	DIODE RD5.1ES-B2	Q630	8-729-119-76	TRANSISTOR 2SA1175-HFE	

D638	8-719-911-19	DIODE ISS119	R604	1-202-933-61	FUSIBLE	0.1 10%
D639	8-719-981-00	DIODE ERC81-004	R605	1-249-428-11	CARBON	8.2K 5%
D640	Δ 8-719-510-09	DIODE D10SC6M	R606	1-214-919-00	CARBON	180K 5%
D641	8-719-921-80	DIODE MTZJ-11B	R607	1-249-418-11	CARBON	1.2K 5%
D650	8-719-160-81	DIODE RD27F-B2	R609	1-249-438-11	CARBON	56K 5%

<FERRITE BEAD>						
F602	1-410-397-21	FERRITE BEAD	I611	1-249-418-11	CARBON	1.2K 5%
F603	1-410-397-21	FERRITE BEAD	I612	1-202-883-11	SOLID	680K 20%
F604	1-410-396-41	FERRITE BEAD	I614	1-249-418-11	CARBON	1.2K 5%
F606	1-410-397-21	FERRITE BEAD	I615	1-215-436-00	METAL	4.3K 1%

F608	1-410-396-41	FERRITE BEAD	I616	1-249-418-11	CARBON	3.6K 1%
F609	1-410-397-21	FERRITE BEAD	I617	1-216-356-00	METAL OXIDE	3.9 5%
F612	1-410-397-21	FERRITE BEAD	I618	1-249-418-11	CARBON	1.2K 5%
F620	1-410-396-41	FERRITE BEAD	I619	1-216-444-11	METAL OXIDE	82K 5%
F621	1-410-397-21	FERRITE BEAD	I620	1-249-418-11	CARBON	1.2K 5%

F622	1-410-397-21	FERRITE BEAD	I621	1-247-691-11	CARBON	18 5%
F623	1-410-397-21	FERRITE BEAD	I622	1-249-424-11	CARBON	3.9K 5%
F626	1-410-397-21	FERRITE BEAD	I623	1-249-417-11	CARBON	IK 5%
F628	1-410-396-41	FERRITE BEAD	I624	1-214-779-00	METAL	120K 1%
F631	1-410-396-41	FERRITE BEAD	I625	1-216-386-11	METAL OXIDE	0.56 5%

<IC>

F626 1-410-396-41 FERRITE BEAD INDUCTOR
F631 1-410-396-41 FERRITE BEAD INDUCTOR

<COIL>

L602	1-459-862-11	COIL, CHoke	90UH
L603	1-459-862-11	COIL, CHoke	90UH
L604	1-408-404-00	INDUCTOR	3.9UH
L605	1-412-526-11	INDUCTOR	120UH
L606	1-459-862-11	COIL, CHoke	90UH

L607	1-408-404-00	INDUCTOR	3.9UH
L610	1-424-602-11	COIL, CHoke	800UH
L611	1-412-546-41	INDUCTOR	560UH
L612	1-412-540-41	INDUCTOR	180UH
L613	1-412-522-21	INDUCTOR	5.6UH

L614	1-412-522-21	INDUCTOR	5.6UH
L615	1-424-417-11	CARBON	100 5%
L616	1-249-417-11	CARBON	2.2K 5%
L617	1-249-429-11	CARBON	10K 5%
L618	1-215-421-00	METAL	1K 1%

L619	1-215-421-00	METAL	1K 1%
L620	1-215-429-11	CARBON	100K 5%
L621	1-215-429-11	CARBON	3.9K 5%
L622	1-215-429-11	CARBON	10K 5%
L623	1-249-417-11	CARBON	IK 5%

L624	1-215-429-11	CARBON	100K 5%
L625	1-215-429-11	CARBON	3.9K 5%
L626	1-215-429-11	CARBON	10K 5%
L627	1-215-429-11	CARBON	IK 5%

L628	1-215-429-11	CARBON	100K 5%
L629	1-215-429-11	CARBON	3.9K 5%
L630	1-215-429-11</td		

CR CG

REF. NO. PART NO. DESCRIPTION

REF. NO. PART NO. DESCRIPTION

Q706 8-729-200-17 TRANSISTOR 2SA1091-0

REF. NO. PART NO. DESCRIPTION

<RESISTOR>

R701	1-202-847-00	SOLID	560K	20%	1/2W
R702	1-202-814-11	SOLID	33K	20%	1/2W
R703	1-202-818-00	SOLID	1K	20%	1/2W
R704	1-202-842-11	SOLID	220K	20%	1/2W
R705	1-202-828-11	SOLID	6.8K	20%	1/2W
R706	1-202-561-00	SOLID	330	5%	1/2W
R707	1-216-510-11	METAL OXIDE	8.2K	5%	5W F
R708	1-249-405-11	CARBON	100	5%	1/4W F
R709	1-249-405-11	CARBON	100	5%	1/4W F
R710	1-215-927-00	METAL OXIDE	47K	5%	3W F
R711	1-249-405-11	CARBON	100	5%	1/4W F
R712	1-249-421-11	CARBON	2.2K	5%	1/4W F
R714	1-249-401-11	CARBON	47	5%	1/4W F
R716	1-249-405-11	CARBON	100	5%	1/4W F
R717	1-249-399-11	CARBON	33	5%	1/4W F
R718	1-249-412-11	CARBON	390	5%	1/4W F
R719	1-249-407-11	CARBON	150	5%	1/4W F
R720	1-249-405-11	CARBON	100	5%	1/4W F
R721	1-249-409-11	CARBON	220	5%	1/4W F
R722	1-215-423-00	METAL	1.2K	1%	1/4W F
R724	1-215-429-00	METAL	2.2K	1%	1/4W F
<VARIABLE RESISTOR>					
RV701	1-249-410-11	CARBON	270	5%	1/4W F

CRT731A 1-251-026-11 SOCKET, PICTURE TUBE

D731	8-719-911-19	DIODE ISS119			
D732	8-719-911-19	DIODE ISS119			
D733	8-719-911-19	DIODE ISS119			
D734	8-719-911-19	DIODE ISS119			
D735	8-719-911-19	DIODE ISS119			
D736	8-719-911-19	DIODE ISS119			
D737	8-719-911-19	DIODE ISS119			
L731	1-408-429-00	INDUCTOR 470UH			
L732	1-408-159-00	COIL, SPOOK CHOKE 3.3UH			
L733	1-408-159-00	COIL, SPOOK CHOKE 3.3UH			
L734	1-408-413-00	INDUCTOR 22UH			
<NEON LAMP>					
NL731	1-519-108-99	LAMP, NEON			
NL732	1-519-108-99	LAMP, NEON			
<TRANSISTOR>					
Q731	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q732	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q733	8-729-119-80	TRANSISTOR 2SC2688-LX			
Q734	8-729-255-12	TRANSISTOR 2SC2551-0			
Q735	8-729-200-17	TRANSISTOR 2SA1091-0			
<PICTURE TUBE SOCKET>					

CRT731A 1-251-026-11 SOCKET, PICTURE TUBE

R731	1-202-847-00	SOLID	560K	20%	1/2W
R732	1-202-814-11	SOLID	33K	20%	1/2W
R733	1-202-818-00	SOLID	1K	20%	1/2W
R734	1-202-842-11	SOLID	220K	20%	1/2W
R735	1-202-828-11	SOLID	6.8K	20%	1/2W
R736	1-202-561-00	SOLID	330	5%	1/2W
R737	1-216-510-11	METAL OXIDE	8.2K	5%	5W F
R738	1-249-405-11	CARBON	100	5%	1/4W F
R739	1-249-405-11	CARBON	100	5%	1/4W F
R740	1-215-927-00	METAL OXIDE	47K	5%	3W F
R741	1-249-405-11	CARBON	100	5%	1/4W F
R742	1-249-421-11	CARBON	2.2K	5%	1/4W F
R743	1-249-401-11	CARBON	47	5%	1/4W F
R745	1-215-455-00	METAL	27K	1%	1/4W F
R746	1-249-405-11	CARBON	100	5%	1/4W F
R747	1-249-399-11	CARBON	33	5%	1/4W F
R748	1-249-412-11	CARBON	390	5%	1/4W F
R749	1-249-410-11	CARBON	270	5%	1/4W F
R750	1-249-405-11	CARBON	100	5%	1/4W F
R751	1-249-409-11	CARBON	220	5%	1/4W F
R752	1-215-423-00	METAL	1.2K	1%	1/4W F
R754	1-215-429-00	METAL	2.2K	1%	1/4W F
<SPARK GAP>					
CG1	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P			
CG3	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P			
CG16	*1-568-880-81	PIN, CONNECTOR 5P			
<PICTURE TUBE SOCKET>					
SG731	1-519-422-11	GAP, SPARK			
SG732	1-519-422-11	GAP, SPARK			

The components identified by shading and mark are critical for safety.
Replace only with part number specified.

The components identified by shading and mark are critical for safety.
Replace only with part number specified.

*A-1331-230-A CB BOARD, COMPLETE

*4-341-751-01 EYELET (EY14,EY15)

*4-341-752-01 EYELET (EY11-EY13)

4-373-933-01 SHEET (TRANSISTOR), BN

*4-389-343-01 SPRING

<CAPACITOR>

C761 1-162-115-00 CERAMIC 330PF 10% 2KV

C762 1-123-948-00 ELECT 22MF 20% 250V

C763 1-102-050-00 CERAMIC 0.01MF 500V

C764 1-162-115-00 CERAMIC 330PF 10% 2KV

C765 1-130-479-00 MYLAR 0.0047MF 5% 50V

<COIL>

C766 1-101-006-00 CERAMIC 0.047MF 50V

C767 1-101-006-00 CERAMIC 0.047MF 50V

C769 1-124-120-11 ELECT 220MF 20% 16V

C770 1-124-120-11 ELECT 220MF 20% 16V

C771 1-102-112-00 CERAMIC 330PF 10% 50V

<CONNECTOR>

CB1 *1-508-784-00 PIN, CONNECTOR (5MM PITCH) 1P

CB3 *1-508-765-00 PIN, CONNECTOR (5MM PITCH) 3P

CB4 *1-564-511-11 PLUG, CONNECTOR 8P

CB5 *1-564-511-11 PLUG, CONNECTOR 8P

CB7 1-568-880-61 PIN, CONNECTOR 5P

<SPARK GAP>

SG761 1-519-422-11 GAP, SPARK

SG762 1-519-422-11 GAP, SPARK

<RESISTOR>

R761 1-202-847-00 SOLID 560K 20% 1/2W

R762 1-202-814-11 SOLID 33K 20% 1/2W

R763 1-202-818-00 SOLID 1K 20% 1/2W

R764 1-202-842-11 SOLID 220K 20% 1/2W

R765 1-202-828-11 SOLID 6.8K 20% 1/2W

<CAPACITOR>

R766 1-216-510-11 METAL OXIDE 8.2K 5% 5W F

R768 1-249-405-11 CARBON 100 5% 1/4W F

R769 1-249-405-11 CARBON 100 5% 1/4W F

R770 1-215-927-00 METAL OXIDE 47K 5% 3W F

<COIL>

R771 1-249-410-11 CARBON 47 5% 1/4W F

R776 1-249-405-11 CARBON 100 5% 1/4W F

R777 1-249-399-11 CARBON 33 5% 1/4W F

<CONNECTOR>

R783 1-215-433-00 METAL 3.3K 20% 1/4W

R784 1-215-429-00 METAL 2.2K 20% 1/4W

R785 1-215-418-00 METAL 750 1X 1/4W

<SPARK GAP>

SG761 1-519-422-11 GAP, SPARK

SG762 1-519-422-11 GAP, SPARK

<RESISTOR>

R761 1-202-847-00 SOLID 10K 1X 1/4W

R741 1-215-433-00 METAL 3.3K 1X 1/4W

R742 1-215-465-00 METAL 6.8K 1X 1/4W

R743 1-215-421-00 METAL 1K 1X 1/4W

R744 1-215-455-00 METAL 27K 1X 1/4W

<CONNECTOR>

DS6 1-691-182-11 CONNECTOR (BOARD TO BOARD) 12P

<IC>

IC1711 8-759-111-69 IC UPC1037HA

IC1712 8-759-602-19 IC M5220L

IC1713 8-759-111-69 IC UPC1037HA

<RESISTOR>

Q761 8-729-119-78 TRANSISTOR 2SC2785-HFE

Q762 8-729-119-78 TRANSISTOR 2SC2785-HFE

Q763 8-729-119-80 TRANSISTOR 2SC2688-LX

Q764 8-729-255-12 TRANSISTOR 2SC2551-0

Q765 8-729-200-17 TRANSISTOR 2SA1091-0

<TRANSISTOR>

Q766 8-729-200-17 TRANSISTOR 2SA1091-0

<PICTURE TUBE SOCKET>

Ds D

D

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK			
R1845	1-215-455-00	METAL	27K 1% 1/4W	C1703	1-124-907-11	ELECT	10MF	20%	50V				L904	1-459-313-00	COIL WITH CORE (HWC)			
R1846	1-215-421-00	METAL	1K 1% 1/4W	C1704	1-123-875-11	ELECT	10MF	20%	50V									
R1850	1-215-461-00	METAL	47K 1% 1/4W	C1705	1-102-963-00	CERAMIC	33PF	5%	50V	D901	8-719-911-19	DIODE ISS119	Q902	8-729-900-89	TRANSISTOR DTC144ES			
R1852	1-215-429-00	METAL	2.2K 1% 1/4W	C1706	1-102-963-00	CERAMIC	33PF	5%	50V	D902	8-719-911-19	DIODE ISS119	Q906	8-729-119-78	TRANSISTOR 2SC2785-HFE			
R1853	1-215-397-00	METAL	100 1% 1/4W	C1707	1-102-963-00	CERAMIC	33PF	5%	50V	D903	8-719-900-95	DIODE V09G	Q907	8-729-119-78	TRANSISTOR 2SC2785-HFE			
R1854	1-215-429-00	METAL	2.2K 1% 1/4W	C1708	1-102-963-00	CERAMIC	33PF	5%	50V	D904	8-719-900-95	DIODE ISS119	Q908	8-729-900-89	TRANSISTOR DTC144ES			
R1855	1-215-397-00	METAL	100 1% 1/4W	C1709	1-102-963-00	CERAMIC	33PF	5%	50V	D905	8-719-900-95	DIODE V09G	Q909	8-729-119-78	TRANSISTOR 2SC2785-HFE			
R1840	1-215-445-00	METAL	10K 1% 1/4W	C1710	1-102-963-00	CERAMIC	33PF	5%	50V	D1704	8-719-900-95	DIODE V09G	Q910	8-729-119-78	TRANSISTOR 2SC2785-HFE			
R1841	1-215-433-00	METAL	3.3K 1% 1/4W	C1711	1-126-233-11	ELECT	22MF	20%	50V	D1705	8-719-900-95	DIODE V09G	Q911	8-729-119-76	TRANSISTOR 2SA1175-HFE			
R1842	1-215-421-00	METAL	1K 1% 1/4W	C1712	1-126-233-11	ELECT	22MF	20%	25V	D1706	8-719-900-95	DIODE V09G	Q912	8-729-119-76	TRANSISTOR 2SA1175-HFE			
R1843	1-215-465-00	METAL	68K 1% 1/4W	C1713	1-102-074-00	CERAMIC	0.001MF	10%	50V	D1707	8-719-911-19	DIODE ISS119						
R1844	1-215-421-00	METAL	1K 1% 1/4W	C1714	1-124-478-11	ELECT	100MF	20%	25V	D1708	8-719-911-19	DIODE ISS119						
R1845	1-215-455-00	METAL	27K 1% 1/4W	C1715	1-124-478-11	ELECT	100MF	20%	25V	D1709	8-719-911-19	DIODE ISS119						
R1846	1-215-455-00	METAL	27K 1% 1/4W	C1716	1-126-803-11	ELECT	47MF	20%	25V	D1710	8-719-911-19	DIODE ISS119						
R1847	1-215-455-00	METAL	27K 1% 1/4W	C1717	1-126-803-11	ELECT	47MF	20%	25V	D1711	8-719-911-19	DIODE ISS119						
R1848	1-215-455-00	METAL	27K 1% 1/4W	C1718	1-102-074-00	CERAMIC	0.001MF	10%	50V	D1712	8-719-911-19	DIODE ISS119						
	<VARIABLE RESISTOR>									D1713	8-719-911-19	DIODE ISS119						
RV983	1-241-630-11	RES, ADJ, CARBON 10K		C1719	1-124-234-00	ELECT	22MF	20%	16V	D1714	8-719-911-19	DIODE ISS119	R901	1-215-463-00	METAL	56K 1% 1/4W		
RV984	1-241-630-11	RES, ADJ, CARBON 10K		C1720	1-130-491-00	MYLAR	0.047MF	5%	50V	D1715	8-719-911-19	DIODE ISS119	R902	1-215-463-00	METAL	56K 1% 1/4W		
	*****	*****		C1721	1-130-491-00	MYLAR	0.047MF	5%	50V	D1716	8-719-911-19	DIODE ISS119	R903	1-215-449-00	METAL	15K 1% 1/4W		
	*****	*****		C1722	1-130-491-00	MYLAR	0.047MF	5%	50V	D1717	8-719-911-19	DIODE ISS119	R904	1-215-455-00	METAL	27K 1% 1/4W		
	*****	*****		C1724	1-126-233-11	ELECT	22MF	20%	25V	D1718	8-719-911-19	DIODE ISS119	R905	1-215-449-00	METAL	15K 1% 1/4W		
*A-1341-579-A	D BOARD, COMPLETE			C1725	1-102-963-00	CERAMIC	33PF	5%	50V				R906	1-215-469-00	METAL	100K 1% 1/4W		
	*****	*****		C1726	1-124-122-11	ELECT	100MF	20%	35V	D1720	8-719-109-50	DIODE RD2.0ES-B1	R907	1-215-469-00	METAL	100K 1% 1/4W		
	*****	*****		C1727	1-102-963-00	CERAMIC	33PF	5%	50V	D1721	8-719-109-50	DIODE RD2.0ES-B1	R908	1-215-469-00	METAL	100K 1% 1/4W		
*4-341-751-01	EYELET (EY1-EY10)			C1728	1-102-963-00	CERAMIC	33PF	5%	50V	D1722	8-719-109-50	DIODE RD2.0ES-B1	R909	1-215-473-00	METAL	150K 1% 1/4W		
4-382-854-11	SCREW (M3X10), P, SW (+)			C1729	1-106-367-00	MYLAR	0.01MF	10%	200V	D1723	8-719-109-50	DIODE RD2.0ES-B1	R910	1-215-437-00	METAL	4.7K 1% 1/4W		
*4-395-527-01	HOLDER (B), TR											R911	1-215-453-00	METAL	22K 1% 1/4W			
	<CAPACITOR>			C1730	1-102-963-00	CERAMIC	33PF	5%	50V			R912	1-215-453-00	METAL	22K 1% 1/4W			
	*****	*****		C1731	1-124-122-11	ELECT	100MF	20%	35V			R913	1-215-437-00	METAL	4.7K 1% 1/4W			
	*****	*****		C1732	1-106-367-00	MYLAR	0.01MF	10%	200V			R914	1-215-453-00	METAL	22K 1% 1/4W			
	*****	*****		C1733	1-102-963-00	CERAMIC	33PF	5%	50V			R915	1-215-423-00	METAL	1.2K 1% 1/4W			
C901	1-126-320-11	ELECT	10MF	20%	16V	C1734	1-102-963-00	CERAMIC	33PF	5%	50V	F901	A-1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V				
C902	1-124-477-11	ELECT	47MF	20%	16V							F901	1-532-233-11	CLIP, FUSE; F901	R916	1-215-453-00	METAL	22K 1% 1/4W
C903	1-130-471-00	MYLAR	0.001MF	5%	50V	C1735	1-124-122-11	ELECT	100MF	20%	35V	F902	A-1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V	R917	1-215-399-00	METAL	120 1% 1/4W
C904	1-130-471-00	MYLAR	0.001MF	5%	50V	C1736	1-106-367-00	MYLAR	0.01MF	10%	200V			R918	1-215-399-00	METAL	120 1% 1/4W	
C905	1-124-477-11	ELECT	47MF	20%	16V	C1737	1-124-937-91	ELECT	10MF	20%	16V			R919	1-215-399-00	METAL	120 1% 1/4W	
C906	1-126-233-11	ELECT	22MF	20%	50V	C1738	1-124-122-11	ELECT	100MF	20%	35V			R920	1-215-399-00	METAL	120 1% 1/4W	
C907	1-126-101-11	ELECT	100MF	20%	16V	C1739	1-136-153-00	FILM	0.01MF	5%	50V			R921	1-215-399-00	METAL	120 1% 1/4W	
C908	1-124-907-11	ELECT	10MF	20%	50V								R922	1-215-399-00	METAL	120 1% 1/4W		
C909	1-130-483-00	MYLAR	0.01MF	5%	50V	C1740	1-124-122-11	ELECT	100MF	20%	35V							
C910	1-131-341-00	TANTALUM	0.1MF	20%	16V	C1741	1-124-122-11	ELECT	100MF	20%	35V							
C911	1-124-477-11	ELECT	47MF	20%	16V	C1742	1-126-104-11	ELECT	47MF	20%	35V							
C912	1-124-803-11	ELECT	1MF	20%	50V	C1743	1-124-478-11	ELECT	100MF	20%	25V							
C913	1-126-233-11	ELECT	47MF	20%	16V	C1744	1-126-375-11	ELECT	100MF	20%	25V							
C914	1-126-233-11	ELECT	22MF	20%	50V	C1745	1-126-375-11	ELECT	100MF	20%	25V							
C915	1-124-477-11	ELECT	4.7MF	20%	50V	C1746	1-124-477-11	ELECT	47MF	20%	16V							
C916	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1747	1-124-477-11	ELECT	47MF	20%	16V							
C917	1-130-471-00	MYLAR	0.001MF	5%	50V	C1748	1-126-101-11	ELECT	10MF	20%	16V							
C918	1-102-963-00	CERAMIC	33PF	5%	50V	C1749	1-126-157-11	ELECT	10MF	20%	16V							
C919	1-102-963-00	CERAMIC	33PF	5%	50V	C1750	1-126-157-11	ELECT	10MF	20%	16V							
C920	1-102-963-00	CERAMIC	33PF	5%	50V	C1751	1-126-096-11	ELECT	10MF	20%	25V							
C921	1-102-963-00	CERAMIC	33PF	5%	50V	C1752	1-126-096-11	ELECT	10MF	20%	25V							
C922	1-102-963-00	CERAMIC	33PF	5%	50V	C1753	1-102-074-00	CERAMIC	0.001MF	10%	50V							
C923	1-102-963-00	CERAMIC	33PF	5%	50V													
C924	1-126-233-11	ELECT	22MF	20%	25V	D1	*1-564-510-11	PLUG, CONNECTOR 7P										
C925	1-126-233-11	ELECT	22MF	20%	25V	D2	*1-564-511-11	PLUG, CONNECTOR 8P										
C926	1-126-233-11	ELECT	22MF	20%	25V	D4	*1-564-508-11	PLUG, CONNECTOR 5P										
C927	1-124-903-11	ELECT	1MF	20%	50V	D5	*1-564-511-11	PLUG, CONNECTOR 8P										
C928	1-124-234-00	ELECT	22MF	20%	16V	D6	*1-691-169-11	PIN, CONNECTOR 12P										
C929	1-126-233-11	ELECT	22MF	20%	25V	D7	*1-564-507-11	PLUG, CONNECTOR 4P										
C930	1-126-233-11	ELECT	22MF	20%	25V	D9	*1-564-507-11	PLUG, CONNECTOR 4P										
C931	1-102-973-00	CERAMIC	100PF	5%	50V	D14	*1-564-513-11	PLUG, CONNECTOR 10P										
C932	1-126-233-11	ELECT	22MF	20%	25V													
C933	1-124-234-00	ELECT	22MF	20%	16V													
C934	1-126-233-11	ELECT	22MF	20%	25V													
C935	1-126-233-11	ELECT	22MF	20%	25V	D1701	8-759-145-58	IC UPC4558C										
C936	1-126-233-11	ELECT	22MF	20%	25V	D1702	8-759-145-58	IC UPC4558C										
C937	1-126-233-11	ELECT	22MF	20%	25V	D1703	8-759-145-58	IC UPC4558C										

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	
R952	I-215-429-00	METAL	2.2K 1/4W	R1719	I-214-792-00	METAL	1 1/4 1/2W	R1782	I-215-898-11	METAL OXIDE	10K 5% 2W	F	R1866	I-215-453-00	METAL	22K 1% 1/4W
R953	I-215-439-00	METAL	5.6K 1/4W	R1720	I-249-411-11	CARBON	330 5% 1/4W	R1783	I-214-804-51	METAL	3.3 1% 1/2W	F	R1867	I-215-437-00	METAL	4.7K 1% 1/4W
R954	I-215-439-00	METAL	5.6K 1/4W	R1721	I-249-417-11	CARBON	1K 5% 1/4W	R1784	I-214-804-51	METAL	3.3 1% 1/2W	F	R1868	I-215-449-00	METAL	15K 1% 1/4W
R955	I-215-435-00	METAL	3.9K 1/4W	R1722	I-249-411-11	CARBON	330 5% 1/4W	R1785	I-215-898-11	METAL OXIDE	10K 5% 2W	F	R1869	I-215-445-00	METAL	10K 1% 1/4W
R956	I-215-437-00	METAL	4.77K 1/4W	R1723	I-249-417-11	CARBON	1K 5% 1/4W	R1786	I-214-804-51	METAL	3.3 1% 1/2W	F	R1870	I-215-445-00	METAL	10K 1% 1/4W
R957	I-215-441-00	METAL	6.8K 1/4W	R1724	I-215-886-11	METAL OXIDE	100 5% 2W	R1787	I-214-804-51	METAL	3.3 1% 1/2W	F	R1871	I-215-445-00	METAL	10K 1% 1/4W
R958	I-215-437-00	METAL	4.7K 1/4W	R1725	I-215-886-11	METAL OXIDE	100 5% 2W	R1788	I-249-433-11	CARBON	22K 5% 1/4W	F	R1872	I-215-437-00	METAL	4.7K 1% 1/4W
R959	I-215-439-00	METAL	5.6K 1/4W	R1726	I-215-886-11	METAL OXIDE	100 5% 2W	R1789	I-249-441-11	CARBON	100K 5% 1/4W	F	R1873	I-215-437-00	METAL	4.7K 1% 1/4W
R960	I-215-439-00	METAL	5.6K 1/4W	R1727	I-214-792-00	METAL	1 1/4 1/2W	R1790	I-249-433-11	CARBON	22K 5% 1/4W	F	R1874	I-215-437-00	METAL	4.7K 1% 1/4W
R961	I-215-439-00	METAL	5.6K 1/4W	R1728	I-214-792-00	METAL	1 1/4 1/2W	R1791	I-249-429-11	CARBON	10K 5% 1/4W	F	R1875	I-215-437-00	METAL	4.7K 1% 1/4W
R962	I-215-441-00	METAL	6.8K 1/4W	R1729	I-214-792-00	METAL	1 1/4 1/2W	R1792	I-215-445-00	METAL	10K 1% 1/4W	F	R1876	I-215-437-00	METAL	4.7K 1% 1/4W
R963	I-215-441-00	METAL	6.8K 1/4W	R1730	I-249-405-11	CARBON	100 5% 1/4W	R1793	I-249-405-11	CARBON	100 5% 1/4W	F	R1877	I-215-437-00	METAL	4.7K 1% 1/4W
R964	I-215-441-00	METAL	6.8K 1/4W	R1731	I-249-417-11	CARBON	1K 5% 1/4W	R1794	I-215-429-00	METAL	2.2K 1% 1/4W	F	R1878	I-215-475-00	METAL	180K 1% 1/4W
R965	I-215-909-11	METAL OXIDE	47 5% 3W	R1732	I-249-405-11	CARBON	100 5% 1/4W	R1795	I-249-433-11	CARBON	22K 5% 1/4W	F	R1879	I-215-475-00	METAL	180K 1% 1/4W
R966	I-215-469-00	METAL	100K 1% 1/4W	R1733	I-249-405-11	CARBON	100 5% 1/4W	R1796	I-249-405-11	CARBON	100 5% 1/4W	F	R1880	I-215-475-00	METAL	180K 1% 1/4W
R967	I-215-421-00	METAL	1K 1% 1/4W	R1734	I-249-405-11	CARBON	100 5% 1/4W	R1797	I-249-429-11	CARBON	10K 5% 1/4W	F	R1881	I-215-461-00	METAL	47K 1% 1/4W
R968	I-215-437-00	METAL	4.7K 1% 1/4W	R1735	I-249-405-11	CARBON	100 5% 1/4W	R1798	I-249-423-11	CARBON	3.3K 5% 1/4W	F	R1882	I-215-445-00	METAL	10K 1% 1/4W
R969	I-249-421-11	CARBON	2.2K 5% 1/4W	R1736	I-249-423-11	CARBON	3.3K 5% 1/4W	R1800	I-249-405-11	CARBON	100 5% 1/4W	F	R1883	I-215-453-00	METAL	22K 1% 1/4W
R970	I-215-909-11	METAL OXIDE	47 5% 3W	R1737	I-249-423-11	CARBON	3.3K 5% 1/4W	R1801	I-215-439-00	METAL	5.6K 1% 1/4W	F	R1884	I-215-397-00	METAL	100 1% 1/4W
R971	I-249-421-11	CARBON	2.2K 5% 1/4W	R1738	I-249-423-11	CARBON	3.3K 5% 1/4W	R1802	I-215-439-00	METAL	5.6K 1% 1/4W	F	R1885	I-215-445-00	METAL	10K 1% 1/4W
R972	I-249-431-11	CARBON	15K 5% 1/4W	R1739	I-249-423-11	CARBON	3.3K 5% 1/4W	R1803	I-215-439-00	METAL	5.6K 1% 1/4W	F	R1886	I-215-445-00	METAL	10K 1% 1/4W
R973	I-249-431-11	CARBON	15K 5% 1/4W	R1740	I-249-417-11	CARBON	1K 5% 1/4W	R1805	I-215-439-00	METAL	5.6K 1% 1/4W	F	R1887	I-215-397-00	METAL	100 1% 1/4W
R974	I-215-399-00	METAL	120 1% 1/4W	R1741	I-249-423-11	CARBON	3.3K 5% 1/4W	R1806	I-249-405-11	CARBON	100 5% 1/4W	F	R1888	I-215-461-00	METAL	47K 1% 1/4W
R975	I-215-399-00	METAL	120 1% 1/4W	R1742	I-249-423-11	CARBON	3.3K 5% 1/4W	R1807	I-249-405-11	CARBON	100 5% 1/4W	F	R1889	I-215-457-00	METAL	33K 1% 1/4W
R976	I-215-399-00	METAL	120 1% 1/4W	R1743	I-249-417-11	CARBON	1K 5% 1/4W	R1808	I-214-792-00	METAL	1 1% 1/2W	F	R1890	I-215-457-00	METAL	33K 1% 1/4W
R977	I-215-399-00	METAL	120 1% 1/4W	R1744	I-249-411-11	CARBON	330 5% 1/4W	R1809	I-214-792-00	METAL	1 1% 1/2W	F	R1892	I-215-445-00	METAL	10K 1% 1/4W
R978	I-215-399-00	METAL	120 1% 1/4W	R1745	I-249-405-11	CARBON	100 5% 1/4W	R1810	I-214-792-00	METAL	1 1% 1/2W	F	R1894	I-215-429-00	METAL	2.2K 1% 1/4W
R979	I-215-399-00	METAL	120 1% 1/4W	R1746	I-214-792-00	METAL	1 1% 1/2W	R1811	I-214-792-00	METAL	1 1% 1/2W	F	R1895	I-215-445-00	METAL	10K 1% 1/4W
R980	I-215-399-00	METAL	120 1% 1/4W	R1747	I-215-886-11	METAL OXIDE	100 5% 2W	R1812	I-214-792-00	METAL	1 1% 1/2W	F	R1896	I-215-445-00	METAL	10K 1% 1/4W
R981	I-215-399-00	METAL	120 1% 1/4W	R1748	I-215-421-00	METAL	1K 1% 1/4W	R1813	I-214-792-00	METAL	1 1% 1/2W	F	R1897	I-215-449-00	METAL	15K 1% 1/4W
R982	I-249-431-11	CARBON	15K 5% 1/4W	R1749	I-215-421-00	METAL	1K 1% 1/4W	R1814	I-249-431-11	CARBON	15K 5% 1/4W	F	R1898	I-215-445-00	METAL	10K 1% 1/4W
R983	I-249-431-11	CARBON	15K 5% 1/4W	R1750	I-215-421-00	METAL	1K 1% 1/4W	R1815	I-247-885-00	CARBON	180K 5% 1/4W	F	R1899	I-215-421-00	METAL	1K 1% 1/4W
R984	I-214-804-51	METAL	3.3 1/2 1/2W	R1751	I-215-421-00	METAL	1K 1% 1/4W	R1816	I-249-431-11	CARBON	15K 5% 1/4W	F	R1900	I-215-429-00	METAL	2.2K 1% 1/4W
R985	I-214-804-51	METAL	3.3 1/2 1/2W	R1752	I-215-421-00	METAL	1K 1% 1/4W	R1817	I-247-885-00	CARBON	180K 5% 1/4W	F	R1901	I-215-449-00	METAL	15K 1% 1/4W
R986	I-214-804-51	METAL	3.3 1/2 1/2W	R1753	I-215-421-00	METAL	1K 1% 1/4W	R1818	I-249-405-11	CARBON	100 5% 1/4W	F	R1902	I-215-445-00	METAL	10K 1% 1/4W
R987	I-215-421-00	METAL	1K 1% 1/4W	R1754	I-214-792-00	METAL	1 1% 1/2W	R1819	I-215-437-00	METAL	4.7K 1% 1/4W	F	R1903	I-215-445-00	METAL	10K 1% 1/4W
R988	I-215-421-00	METAL	1K 1% 1/4W	R1755	I-215-469-00	METAL	100K 1% 1/4W	R1820	I-215-437-00	METAL	4.7K 1% 1/4W	F	R1904	I-215-445-00	METAL	10K 1% 1/4W
R989	I-215-421-00	METAL	1K 1% 1/4W	R1756	I-215-437-00	METAL	4.7K 1% 1/4W	R1821	I-215-437-00	METAL	4.7K 1% 1/4W	F	R1905	I-215-445-00	METAL	10K 1% 1/4W
R990	I-215-421-00	METAL	1K 1% 1/4W	R1757	I-215-437-00	METAL	4.7K 1% 1/4W	R1822	I-215-445-00	METAL	10K 1% 1/4W	F	R1906	I-215-429-00	METAL	2.2K 1% 1/4W
R991	I-215-421-00	METAL	1K 1% 1/4W	R1758	I-215-437-00	METAL	4.7K 1% 1/4W	R1823	I-215-445-00	METAL	10K 1% 1/4W	F	R1907	I-215-445-00	METAL	10K 1% 1/4W
R992	I-215-421-00	METAL	1K 1% 1/4W	R1759	I-249-405-11	CARBON	100 5% 1/4W	R1824	I-215-433-00	METAL	3.3K 1% 1/4W	F	R1908	I-215-445-00	METAL	10K 1% 1/4W
R993	I-249-429-11	CARBON	10K 5% 1/4W	R1760	I-249-427-11	CARBON	6.8K 5% 1/4W	R1825	I-215-433-00	METAL	3.3K 1% 1/4W	F	R1909	I-215-445-00	METAL	10K 1% 1/4W
R994	I-249-429-11	CARBON	10K 5% 1/4W	R1761	I-249-419-11	CARBON	1.5K 5% 1/4W	R1826	I-215-433-00	METAL	3.3K 1% 1/4W	F	R1910	I-215-445-00	METAL	10K 1% 1/4W
R995	I-215-457-00	METAL	33K 1% 1/4W	R1762	I-215-445-00	METAL	10K 1% 1/4W	R1827	I-215-445-00	METAL	10K 1% 1/4W	F	R1911	I-215-453-00	METAL	22K 1% 1/4W
R996	I-215-473-00	METAL	150K 1% 1/4W	R1763	I-249-427-11	CARBON	6.8K 5% 1/4W	R1828	I-215-445-00	METAL	10K 1% 1/4W	F	R1916	I-215-423-00	METAL	1.2K 1% 1/4W
R999	I-215-455-00	METAL	27K 1% 1/4W	R1764	I-249-419-11	CARBON	1.5K 5% 1/4W	R1829	I-249-434-11	CARBON	27K 5% 1/4W	F	R1920	I-215-453-00	METAL	22K 1% 1/4W
R1701	I-249-411-11	CARBON	330 5% 1/4W	R1765	I-249-419-11	CARBON	1.5K 5% 1/4W	R1830	I-249-434-11	CARBON	27K 5% 1/4W	F	R1921	I-215-445-00	METAL	10K 1% 1/4W
R1702	I-249-427-11	CARBON	6.8K 5% 1/4W	R1766	I-249-427-11	CARBON	6.8K 5% 1/4W	R1831	I-249-405-11	CARBON	100 5% 1/4W	F	R1922	I-215-445-00	METAL	10K 1% 1/4W
R1703	I-249-427-11	CARBON	6.8K 5% 1/4W	R1767	I-249-427-11	CARBON	6.8K 5% 1/4W	R1832	I-215-471-00	METAL	120K 1% 1/4W	F	R1924	I-215-429-00	METAL	2.2K 1% 1/4W
R1704	I-249-411-11	CARBON	330 5% 1/4W	R1768	I-249-439-11	CARBON	6.8K 5% 1/4W	R1833	I-215-471-00	METAL	120K 1% 1/4W	F	R1925	I-215-429-00	METAL	2.2K 1% 1/4W
R1705	I-249-411-11	CARBON	330 5% 1/4W	R1769	I-215-445-00	METAL	10K 1% 1/4W	R1834	I-215-471-00	METAL	120K 1% 1/4W	F	R1926	I-215-429-00	METAL	2.2K 1% 1/4W
R1706	I-249-427-11	CARBON	6.8K 5% 1/4W	R1770	I-249-405-11	CARBON	100 5% 1/4W	R1835	I-215-437-00	METAL	4.7K 1% 1/4W	F	R1927	I-215-445-00	METAL	10K 1% 1/4W
R1707	I-249-411-11	CARBON	330 5% 1/4W	R1771	I-249-405-11	CARBON	100 5% 1/4W	R1836	I-215-437-00	METAL	4.7K 1% 1/4W	F	R1928	I-215-421-		

The components identified by shading and mark A are critical for safety.
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK																
R952	1-216-113-00	METAL GLAZE	470K 5% 1/10W	C831	1-106-220-00	NYLAR	0.1MF 10% 100V	N2	*1-568-880-61	PIN, CONNECTOR 5P	R826	1-214-962-00	METAL	820K 1% 1/4W																	
R953	1-216-188-00	METAL GLAZE	390 5% 1/8W	C832	1-124-907-11	ELECT	10MF 20% 50V	N3	*1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	R827	1-214-764-00	METAL	30K 1% 1/4W																	
R954	1-216-039-00	METAL GLAZE	390 5% 1/10W	C833	1-126-233-11	ELECT	22MF 20% 50V	N4	*1-568-879-51	PIN, CONNECTOR 4P	R828	1-215-455-00	METAL	27K 1% 1/4W																	
R955	1-216-039-00	METAL GLAZE	390 5% 1/10W	C834	1-102-121-00	CERAMIC	0.0022MF 10% 50V	N5	*1-568-880-51	PIN, CONNECTOR 5P	R829	1-215-455-00	METAL	27K 1% 1/4W																	
R956	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C835	1-124-927-11	ELECT	4.7MF 20% 50V	N6	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	R830	1-215-928-11	METAL OXIDE	68K 5% 3W F																	
R957	1-216-039-00	METAL GLAZE	390 5% 1/10W	C836	1-130-475-00	NYLAR	0.0022MF 5% 50V	<CONNECTOR>																							
R958	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C837	1-136-169-00	FILM	0.22MF 5% 50V	N7	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	R831	1-215-928-11	METAL OXIDE	68K 5% 3W F																	
R959	1-216-089-00	METAL GLAZE	8.2K 5% 1/10W	C838	1-130-475-00	NYLAR	0.0022MF 5% 50V	N8	*1-564-511-11	PLUG, CONNECTOR 8P	R832	1-249-417-11	CARBON	1K 5% 1/4W																	
R960	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	C839	1-102-106-00	CERAMIC	100PF 10% 50V	N9	*1-568-784-00	PIN, CONNECTOR (5MM PITCH) 1P	R833	1-249-419-11	CARBON	1.5K 5% 1/4W																	
R961	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	C840	1-136-807-11	FILM	0.018MF 3% 1.6KV	N10	*1-564-511-11	PLUG, CONNECTOR 8P	R834	1-249-419-11	CARBON	1.5K 5% 1/4W																	
R990	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C841	1-136-729-11	FILM	1.5MF 5% 400V	N11	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	R835	1-215-429-00	METAL	2.2K 1% 1/4W																	
R991	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C842	1-130-471-00	NYLAR	0.001MF 5% 50V	N12	*1-506-371-00	PIN, CONNECTOR 2P	R836	1-215-435-00	METAL	3.9K 1% 1/4W																	
R992	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C843	1-136-173-00	FILM	0.47MF 5% 50V	N13	*1-506-371-00	PIN, CONNECTOR 2P	R837	1-249-433-11	CARBON	22K 5% 1/4W																	
R993	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C844	1-110-364-11	NYLAR	0.1MF 10% 200V	N14	*1-506-371-00	PIN, CONNECTOR 2P	R838	1-249-435-11	CARBON	33K 5% 1/4W																	
R994	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C845	1-136-169-00	FILM	0.22MF 5% 50V	N15	*1-506-371-00	PIN, CONNECTOR 2P	R839	1-249-438-11	CARBON	56K 5% 1/4W																	
R995	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C846	1-162-114-00	CERAMIC	0.0047MF 2KV	N16	*1-506-371-00	PIN, CONNECTOR 2P	R840	1-249-441-11	CARBON	27K 5% 1/4W																	
R996	1-216-202-00	METAL GLAZE	1.5K 5% 1/8W	C847	1-124-907-11	ELECT	10MF 20% 50V	N17	*1-506-371-00	PIN, CONNECTOR 2P	R841	1-249-429-11	CARBON	10K 5% 1/4W																	
R997	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C848	1-124-907-11	ELECT	10MF 20% 50V	N18	*1-506-371-00	PIN, CONNECTOR 2P	R842	1-249-435-11	CARBON	33K 5% 1/4W																	
R998	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C849	1-106-220-00	NYLAR	0.1MF 10% 100V	N19	*1-506-371-00	PIN, CONNECTOR 2P	R843	1-249-433-11	CARBON	3.3K 5% 1/4W																	
R999	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C850	1-126-329-11	ELECT	470MF 20% 50V	N20	*1-506-371-00	PIN, CONNECTOR 2P	R844	1-249-433-11	CARBON	22K 5% 1/4W																	
R999	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C851	1-124-907-11	ELECT	100MF 20% 50V	N21	*1-506-371-00	PIN, CONNECTOR 2P	R845	1-249-435-11	CARBON	33K 5% 1/4W																	

*A-1390-305-A				C856	1-162-114-00	CERAMIC	0.0047MF 2KV	<TRANSISTOR>																							
*A-1390-305-A				C858	1-124-119-00	ELECT	330MF 20% 16V	<TRANSISTOR>																							
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*4-341-751-01				<DIODE>																											
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4-383-023-01				D803	8-719-921-43	DIODE MTZJ-5.1B		<TRANSISTOR>																							
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C801				D807	8-719-921-43	DIODE MTZJ-5.1B		<RESISTOR>																							
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C808				D815	8-719-921-88	DIODE MTZJ-13B		<RESISTOR>																							
C809				D816	8-719-945-80	DIODE ERC06-15S		<RESISTOR>																							
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C821				D828	8-719-903-09	DIODE V30N		<RESISTOR>																							
C822				D829	8-7																										

N	ZR	ZG	ZB	P
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The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R890	1-249-431-11	CARBON METAL OXIDE	15K 5% 3W F	R1911	1-202-822-00	SOLID	2.2K 20% 1/2W	C1430	I-163-038-00	CERAMIC CHIP 0.1MF	25V	IC1404	8-759-055-52	IC SDA9089XGEG	
R891	1-216-489-11	METAL OXIDE	27K 5% 3W F	R1912	1-202-822-00	SOLID	2.2K 20% 1/2W	C1431	I-163-031-11	CERAMIC CHIP 0.01MF	50V	IC1405	8-759-046-27	IC SDA9086-3	
R892	1-249-417-11	CARBON	1K 5% 1/4W	R1913	I-249-414-11	CARBON	560 5% 1/4W	C1432	I-163-031-11	CERAMIC CHIP 0.01MF	50V	IC1406	8-759-504-21	IC TDA8443A/C4	
R893	1-215-453-00	METAL	22K 1K 1/4W	R1914	I-249-414-11	CARBON	560 5% 1/4W	C1433	I-163-031-11	CERAMIC CHIP 0.01MF	50V	IC1410	8-759-037-45	IC MC78L08ACPRP	
R894	1-249-401-11	CARBON	47 5% 1/4W					C1434	I-163-038-00	CERAMIC CHIP 0.1MF	25V	IC1411	8-759-081-30	IC MC78L05ACPRP	
R895	1-202-731-00	SOLID	10M 20% 1/2W					C1435	I-163-038-00	CERAMIC CHIP 0.1MF	25V				
R896	1-260-111-11	CARBON	10K 5% 1/2W					C1436	I-163-038-00	CERAMIC CHIP 0.1MF	25V				
R897	1-247-881-00	CARBON	120K 5% 1/4W					C1437	I-164-343-11	CERAMIC CHIP 0.056MF	10%				
R898	1-202-730-00	SOLID	8.2M 20% 1/2W	ZG2	*1-564-523-11	PLUG, CONNECTOR 8P		C1438	I-163-009-11	CERAMIC CHIP 0.001MF	104				
R899	1-249-429-11	CARBON	10K 5% 1/4W	ZG19	*1-691-292-11	PIN, CONNECTOR (PC BOARD) 3P		C1441	I-164-005-11	CERAMIC CHIP 0.47MF	25V	L1401	1-408-418-00	INDUCTOR	56UH
R903	1-202-541-31	SOLID	47 5% 1/2W					C1442	I-164-005-11	CERAMIC CHIP 0.47MF	25V	L1405	1-408-407-00	INDUCTOR	6.8UH
R904	1-215-928-11	METAL OXIDE	68K 5% 3W F					C1443	I-163-251-11	CERAMIC CHIP 100PF	5%	L1406	1-408-407-00	INDUCTOR	6.8UH
R910	1-249-425-11	CARBON	4.7K 5% 1/4W					C1444	I-164-005-11	CERAMIC CHIP 0.47MF	25V				
								C1445	I-164-005-11	CERAMIC CHIP 0.47MF	25V				
								C1446	I-164-005-11	CERAMIC CHIP 0.47MF	25V				
								C1447	I-163-038-00	CERAMIC CHIP 0.1MF	25V	Q1401	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
								C1448	I-164-222-11	CERAMIC CHIP 0.22MF	25V	Q1402	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
								C1449	I-163-257-11	CERAMIC CHIP 180PF	5%	Q1403	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
								C1450	I-164-005-11	CERAMIC CHIP 0.47MF	25V	Q1404	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
								C1452	I-163-038-00	CERAMIC CHIP 0.1MF	25V	Q1406	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
								C1453	I-163-038-00	CERAMIC CHIP 0.1MF	25V	Q1407	8-729-216-22	TRANSISTOR 2SA1162-G	
								C1454	I-163-038-00	CERAMIC CHIP 0.1MF	25V	Q1408	8-729-216-22	TRANSISTOR 2SA1162-G	
								C1455	I-163-133-00	CERAMIC CHIP 470PF	5%	Q1409	8-729-216-22	TRANSISTOR 2SA1162-G	
								C1456	I-163-133-00	CERAMIC CHIP 470PF	50V	Q1413	8-729-216-22	TRANSISTOR 2SA1162-G	
								C1457	I-164-005-11	CERAMIC CHIP 0.47MF	25V				
								C1458	I-164-005-11	CERAMIC CHIP 0.47MF	25V	Q1414	8-729-900-53	TRANSISTOR DTC114EK	
								C1461	I-164-005-11	CERAMIC CHIP 0.47MF	25V	Q1415	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
T801	1-437-078-00	TRANSFORMER, HORIZONTAL DRIVE		R1921	I-162-115-00	CERAMIC	330PF 10% 2KV	C1462	I-164-005-11	CERAMIC CHIP 0.47MF	25V	Q1416	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
R1922	1-437-090-00	HDT		R1923	I-249-414-11	CARBON	560 5% 1/4W	C1463	I-126-101-11	ELECT	100MF	Q1417	8-729-900-53	TRANSISTOR DTC114BK	
T803	A-1-453-121-11	TRANSFORMER ASSY, FLYBACK (NX-263084)		R1924	I-249-414-11	CARBON	560 5% 1/4W	C1464	I-126-101-11	ELECT	100MF	Q1418	8-729-900-53	TRANSISTOR DTC114EK	
								C1465	I-126-101-11	ELECT	100MF	Q1419	8-729-900-53	TRANSISTOR DTC114EK	
								C1466	I-126-101-11	ELECT	100MF	Q1421	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
								C1467	I-126-101-11	ELECT	100MF	Q1422	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
								C1471	I-164-004-11	CERAMIC CHIP 0.1MF	10%	Q1423	8-729-900-36	TRANSISTOR DTC124S	
								C1472	I-164-004-11	CERAMIC CHIP 0.1MF	10%				
								C1473	I-164-004-11	CERAMIC CHIP 0.1MF	10%				
								C1481	I-164-005-11	CERAMIC CHIP 0.47MF	25V	JR1401	1-216-295-00	METAL GLAZE 0 5% 1/10W	
								C1482	I-163-001-11	CERAMIC CHIP 220PF	10%	JR1402	1-216-295-00	METAL GLAZE 0 5% 1/10W	
								C1491	I-124-907-11	ELECT 10MF	20%	JR1403	1-216-295-00	METAL GLAZE 0 5% 1/10W	
											R1401	1-216-097-00	METAL GLAZE 100K 5% 1/10W		
											R1402	1-216-073-00	METAL GLAZE 10K 5% 1/10W		
											R1403	I-216-025-00	METAL GLAZE 100 5% 1/10W		
											R1404	I-216-025-00	METAL GLAZE 100 5% 1/10W		
											R1405	I-216-049-00	METAL GLAZE 1K 5% 1/10W		
											R1406	I-216-051-00	METAL GLAZE 1.2K 5% 1/10W		
											R1407	I-216-057-00	METAL GLAZE 2.2K 5% 1/10W		
											R1408	I-216-041-00	METAL GLAZE 470 5% 1/10W		
											R1410	I-216-029-00	METAL GLAZE 150 5% 1/10W		
											R1411	I-216-041-00	METAL GLAZE 470 5% 1/10W		
											R1412	I-216-041-00	METAL GLAZE 470 5% 1/10W		
											R1413	I-216-041-00	METAL GLAZE 470 5% 1/10W		
											R1401	I-216-041-00	METAL GLAZE 470 5% 1/10W		
											R1414	I-216-041-00	METAL GLAZE 470 5% 1/10W		
											R1415	I-216-041-00	METAL GLAZE 470 5% 1/10W		
											R1417	I-216-033-00	METAL GLAZE 220 5% 1/10W		
											R1419	I-216-027-00	METAL GLAZE 120 5% 1/10W		
											R1421	I-216-033-00	METAL GLAZE 220 5% 1/10W		
											R1422	I-216-023-00	METAL GLAZE 82 5% 1/10W		
											R1424	I-216-041-00	METAL GLAZE 470 5% 1/10W		
											R1425	I-216-041-00	METAL GLAZE 470 5% 1/10W		
											R1426	I-216-041-00	METAL GLAZE 470 5% 1/10W		
											R1427	I-216-041-00	METAL GLAZE 470 5% 1/10W		
											R1429	I-216-091-00	METAL GLAZE 56K 5% 1/10W		
											R1431	I-216-029-00	METAL GLAZE 150 5% 1/10W		
											R1432	I-216-031-00	METAL GLAZE 180 5% 1/10W		

P A1

Part 1

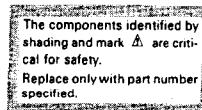
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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK		
C509	I-164-004-II	CERAMIC CHIP 0.0MF	10% 25V	L001	I-408-421-00	INDUCTOR	100UH	R505	I-216-075-00	METAL GLAZE	12K 5%	1/10W	C05	I-163-037-11	CERAMIC CHIP 0.022MF	10% 25V	
C510	I-124-925-11	ELECT 2.2MF	20% 50V	L501	I-410-119-11	INDUCTOR	1MMH	R506	I-216-049-00	METAL GLAZE	1K 5%	1/10W	C06	I-124-120-11	ELECT 220MF	20% 16V	
C511	I-106-375-12	NYLAR 0.022MF	10% 250V	L561	I-408-409-00	INDUCTOR	10UH	R507	I-216-039-00	METAL GLAZE	120K 5%	1/10W	C07	I-124-903-11	ELECT 1MF	20% 50V	
C512	I-126-103-11	ELECT 470MF	20% 50V	L562	I-408-409-00	INDUCTOR	10UH	R509	I-216-039-00	METAL GLAZE	390 5%	1/10W	C08	I-163-097-00	CERAMIC CHIP 15PF	5% 50V	
C513	I-163-209-00	CERAMIC CHIP 0.0015MF	5% 50V	L563	I-408-947-00	INDUCTOR	2.2MMH	R510	I-216-073-00	METAL GLAZE	10K 5%	1/10W	C09	I-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	
C514	I-163-105-00	CERAMIC CHIP 33PF	5% 50V	Q002	8-729-216-22	TRANSISTOR 2SA1162-G		R511	I-216-097-00	METAL GLAZE	100K 5%	1/10W	C10	I-163-133-00	CERAMIC CHIP 470PF	5% 50V	
C519	I-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	Q003	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R512	I-216-049-00	METAL GLAZE	1K 5%	1/10W	C11	I-163-037-11	CERAMIC CHIP 0.022MF	10% 25V	
C522	I-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	Q501	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R513	I-216-230-00	METAL GLAZE	22K 5%	1/8W	C12	I-163-127-00	CERAMIC CHIP 270PF	5% 50V	
C523	I-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	Q502	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R514	I-216-061-00	METAL GLAZE	3.3K 5%	1/10W	C13	I-163-117-00	CERAMIC CHIP 100PF	5% 50V	
C531	I-164-493-11	CERAMIC CHIP 0.047MF	10% 50V	Q503	8-729-901-01	TRANSISTOR DTC144EK		R515	I-216-049-00	METAL GLAZE	1K 5%	1/10W	C14	I-163-097-00	CERAMIC CHIP 15PF	5% 50V	
C532	I-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	Q508	8-729-901-01	TRANSISTOR DTC144EK		R516	I-216-039-00	METAL GLAZE	390 5%	1/10W	C15	I-163-103-00	CERAMIC CHIP 27PF	5% 50V	
C538	I-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	Q509	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R517	I-216-039-00	METAL GLAZE	390 5%	1/10W	C16	I-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	
C541	I-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q550	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R518	I-216-075-00	METAL GLAZE	12K 5%	1/10W	C17	I-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	
C542	I-163-037-11	CERAMIC CHIP 0.022MF	10% 25V	Q551	8-729-901-01	TRANSISTOR DTC144EK		R519	I-216-033-00	METAL GLAZE	220 5%	1/10W	C18	I-163-093-00	CERAMIC CHIP 10PF	5% 50V	
C543	I-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	Q552	8-729-901-01	TRANSISTOR DTC144EK		R520	I-216-093-00	METAL GLAZE	68K 5%	1/10W	C19	I-163-089-00	CERAMIC CHIP 6PF	0.25PF 50V	
C544	I-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	Q564	8-729-216-22	TRANSISTOR 2SA1162-G		R521	I-216-053-00	METAL GLAZE	1.5K 5%	1/10W	C20	I-163-125-00	CERAMIC CHIP 220PF	5% 50V	
C546	I-164-004-11	CERAMIC CHIP 0.0MF	10% 25V	Q565	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R522	I-216-085-00	METAL GLAZE	33K 5%	1/10W	C21	I-163-833-00	CERAMIC CHIP 0.068MF	25V	
C547	I-163-020-00	CERAMIC CHIP 0.0082MF	10% 50V	Q566	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R523	I-216-065-00	METAL GLAZE	4.7K 5%	1/10W	C22	I-163-117-00	CERAMIC CHIP 100PF	5% 50V	
C549	I-163-389-11	CERAMIC CHIP 0.033MF	10% 25V	Q567	8-729-901-01	TRANSISTOR DTC144EK		R524	I-216-069-00	METAL GLAZE	3.9K 5%	1/10W	C23	I-163-210-00	CERAMIC CHIP 0.0016MF	5% 50V	
C550	I-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	Q568	8-729-901-01	TRANSISTOR DTC144EK		R525	I-216-093-00	METAL GLAZE	68K 5%	1/10W	C24	I-164-505-11	CERAMIC CHIP 2.2MF	16V	
C552	I-163-037-11	CERAMIC CHIP 0.022MF	10% 25V	Q569	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R526	I-216-073-00	METAL GLAZE	10K 5%	1/10W	C25	I-164-505-11	CERAMIC CHIP 2.2MF	16V	
C559	I-164-004-11	CERAMIC CHIP 0.0MF	10% 25V	Q570	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R527	I-216-689-11	METAL GLAZE	39K 5%	1/10W	C26	I-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	
C560	I-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	JR002	I-216-295-00	METAL GLAZE	0 5%	1/10W	R528	I-216-049-00	METAL GLAZE	1K 5%	1/10W	C28	I-163-137-00	CERAMIC CHIP 680PF	5% 50V
C562	I-216-295-00	METAL GLAZE 0 5%	1/10W	JR001	I-216-025-00	METAL GLAZE	100 5%	1/10W	R529	I-216-696-11	METAL CHIP	75K 0.50%	1/10W	C30	I-163-171-00	FILM 0.33MF	5% 50V
C563	I-163-031-11	CERAMIC CHIP 0.01MF	50V	JR002	I-216-025-00	METAL GLAZE	100 5%	1/10W	R531	I-216-085-00	METAL GLAZE	33K 5%	1/10W	C32	I-163-038-00	CERAMIC CHIP 0.1MF	25V
C564	I-163-031-11	CERAMIC CHIP 0.01MF	50V	JR003	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R532	I-249-427-11	METAL	6.8K 5%	1/4W	C33	I-124-910-11	ELECT 47MF	20% 50V
C565	I-163-031-11	CERAMIC CHIP 0.01MF	50V	JR006	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R533	I-216-105-00	METAL GLAZE	220K 5%	1/10W	C34	I-124-907-11	ELECT 10MF	20% 50V
C566	I-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	JR007	I-216-073-00	METAL GLAZE	10K 5%	1/10W	R535	I-216-057-00	METAL GLAZE	2.2K 5%	1/10W	C35	I-163-243-11	CERAMIC CHIP 47PF	5% 50V
C567	I-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	JR008	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R536	I-216-057-00	METAL GLAZE	2.2K 5%	1/10W	C36	I-163-239-11	CERAMIC CHIP 33PF	5% 50V
C568	I-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	JR010	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R537	I-216-295-00	METAL GLAZE	0 5%	1/10W	C37	I-163-135-00	CERAMIC CHIP 560PF	5% 50V
C569	I-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	JR011	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R539	I-216-657-11	METAL CHIP	1.8K 0.50%	1/10W	C39	I-163-135-00	CERAMIC CHIP 560PF	5% 50V
C570	I-162-568-11	CERAMIC CHIP 0.33MF	10% 16V	JR012	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R540	I-216-295-00	METAL GLAZE	0 5%	1/10W	C40	I-163-263-11	CERAMIC CHIP 330PF	5% 50V
<FILTER>																	
CD001	I-1577-364-11	VIBRATOR, CERAMIC		R014	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R541	I-216-049-00	METAL GLAZE	1K 5%	1/10W	C40	I-163-038-00	CERAMIC CHIP 0.1MF	25V
<CONNECTOR>																	
CN1406-1-569-880-61	PIN, CONNECTOR 5P		R015	I-216-296-00	METAL GLAZE	0 5%	1/8W	R542	I-216-025-00	METAL GLAZE	100 5%	1/10W	C53	I-163-038-00	CERAMIC CHIP 0.1MF	25V	
CN1413-1-695-301-11	CONNECTOR, BOARD TO BOARD 40P		R016	I-216-045-00	METAL GLAZE	680 5%	1/10W	R544	I-216-085-00	METAL GLAZE	33K 5%	1/10W	C54	I-163-038-00	CERAMIC CHIP 0.1MF	25V	
CN1426-1-568-881-51	PIN, CONNECTOR 6P		R017	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R545	I-216-033-00	METAL GLAZE	220 5%	1/10W	<CONNECTOR>				
CN1432-1-568-882-51	PIN, CONNECTOR 7P		R018	I-216-041-00	METAL GLAZE	470 5%	1/10W	R546	I-216-061-00	METAL GLAZE	3.3K 5%	1/10W					
CN1441-1-564-511-11	PLUG, CONNECTOR 8P		R020	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R547	I-216-049-00	METAL GLAZE	1K 5%	1/10W					
<DIODE>																	
D001	8-719-027-82	DIODE MA3039H-TX		R021	I-216-065-00	METAL GLAZE	4.7K 5%	1/10W	R548	I-216-049-00	METAL GLAZE	1K 5%	1/10W	CN1737-1-564-511-11	PLUG, CONNECTOR 8P		
D501	8-719-800-73	DIODE ISS226		R022	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R549	I-216-049-00	METAL GLAZE	1K 5%	1/10W	CN1741-1-564-511-11	PLUG, CONNECTOR 8P		
D503	8-719-401-31	DIODE MA3047L-TX		R023	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R550	I-216-073-00	METAL GLAZE	1K 5%	1/10W	<TRIMMER>			
D504	8-719-400-18	DIODE MA152WK		R024	I-216-075-00	METAL GLAZE	12K 5%	1/10W	R551	I-216-085-00	METAL GLAZE	33K 5%	1/10W				
D510	8-719-105-91	DIODE RD5.6K-B2		R025	I-216-073-00	METAL GLAZE	1K 5%	1/10W	R552	I-216-073-00	METAL GLAZE	100K 5%	1/10W				
<IC>																	
IC001	8-759-072-93	IC SDA30C162		R026	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R553	I-216-085-00	METAL GLAZE	1K 5%	1/10W	<DIODE>			
*1-540-123-11	SOCKET, IC 68P; IC001		R027	I-216-073-00	METAL GLAZE	1K 5%	1/10W	R554	I-216-109-00	METAL GLAZE	330K 5%	1/10W					
IC003	8-759-160-87	IC M27CS12-20B1-AE27		R028	I-216-049-00	METAL GLAZE	1K 5%	1/10W	R555	I-216-049-00	METAL GLAZE	1K 5%	1/10W				
IC501	8-759-513-48	IC TDA2595/V9		R029	I-216-043-00	METAL GLAZE	560 5%	1/10W	R556	I-216-073-00	METAL GLAZE	10K 5%	1/10W				
IC561	8-752-347-92	IC CXD2018Q		R030	I-216-037-00	METAL GLAZE	330 5%	1/10W	R557	I-216-085-00	METAL GLAZE	33K 5%	1/10W				
<COIL>																	
IC001	8-759-072-93	IC SDA30C162		R040	I-216-081-00	METAL GLAZE	22K 5%	1/10W	R558	I-216-109-00	METAL GLAZE	330K 5%	1/10W	D01	8-719-400-18	DIODE MA152WK	
R041	I-216-043																

V



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK		
<COIL>									
LO1	I-408-411-00	INDUCTOR	15UH	R47	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W		
LO2	I-408-414-00	INDUCTOR	27UH	R48	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W		
LO3	I-408-417-00	INDUCTOR	47UH	R49	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W		
LO4	I-408-413-00	INDUCTOR	22UH	R50	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W		
LO5	I-408-409-00	INDUCTOR	10UH	R54	1-216-073-00	METAL GLAZE	10K 5% 1/10W		
<TRANSISTOR>									
Q01	8-729-120-28	TRANSISTOR	2SC1623-L5L6	X02	1-567-495-11	OSCILLATOR, CRYSTAL			
Q03	8-729-120-28	TRANSISTOR	2SC1623-L5L6	*****					
Q04	8-729-120-28	TRANSISTOR	2SC1623-L5L6	MISCELLANEOUS					
Q06	8-729-120-28	TRANSISTOR	2SC1623-L5L6	*****					
Q07	8-729-120-28	TRANSISTOR	2SC1623-L5L6	*****					
Q08	8-729-216-22	TRANSISTOR	2SA1162-G	*****					
Q09	8-729-120-28	TRANSISTOR	2SC1623-L5L6	Δ-1-241-744-11	RESISTOR ASSY (HIGH-VOLTAGE)				
Q10	8-729-120-28	TRANSISTOR	2SC1623-L5L6	Δ-1-451-396-21	DEFLECTION YOKE (Y936PA)				
Q11	8-729-120-28	TRANSISTOR	2SC1623-L5L6	Δ-1-452-443-13	NECK ASSY, PICTURE TUBE (NA367)				
Q12	8-729-901-00	TRANSISTOR	DTC124EK	Δ-1-453-108-11	DC BLOCK, HIGH-VOLTAGE				
<RESISTOR>									
JR02	I-216-295-00	METAL GLAZE	0 5% 1/10W	1-574-590-31	LEAD ASSY, HIGH-VOLTAGE				
R01	I-216-025-00	METAL GLAZE	100 5% 1/10W	Δ-1-590-501-11	CORD, POWER (WITH NOISE FILTER)				
R02	I-216-025-00	METAL GLAZE	100 5% 1/10W	Δ-8-736-631-05	PICTURE TUBE (SD-249 (G))				
R03	I-216-055-00	METAL GLAZE	1.8K 5% 1/10W	Δ-8-736-632-05	PICTURE TUBE (SD-249 (B))				
R04	I-216-049-00	METAL GLAZE	1K 5% 1/10W	Δ-8-736-633-05	PICTURE TUBE (SD-249 (R))				

R05	I-216-041-00	METAL GLAZE	470 5% 1/10W	ACCESSORIES AND PACKING MATERIALS					
R06	I-216-029-00	METAL GLAZE	150 5% 1/10W	*****					
R07	I-216-041-00	METAL GLAZE	470 5% 1/10W	*****					
R08	I-216-071-00	METAL GLAZE	8.2K 5% 1/10W	*****					
R09	I-216-091-00	METAL GLAZE	56K 5% 1/10W	*****					

R10	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W	3-755-820-11	MANUAL, INSTRUCTION				
R11	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W	3-755-820-41	MANUAL, INSTRUCTION				
R12	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W	*4-030-895-01	JOINT				
R13	I-216-065-00	METAL GLAZE	4.7K 5% 1/10W	*4-037-938-01	INDIVIDUAL CARTON				
R15	I-216-061-00	METAL GLAZE	3.3K 5% 1/10W	*4-037-939-01	TRAY				

R16	I-216-033-00	METAL GLAZE	220 5% 1/10W	*4-037-940-01	PLATE, TOP				
R17	I-216-033-00	METAL GLAZE	220 5% 1/10W	*4-037-941-01	PLATE, BOTTOM				
R20	I-216-049-00	METAL GLAZE	1K 5% 1/10W	*4-037-942-01	CUSHION (UPPER) (ASSY)				
R21	I-216-049-00	METAL GLAZE	1K 5% 1/10W	*4-037-943-01	CUSHION (LOWER) (ASSY)				
R22	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W	*4-388-954-01	BAG, PROTECTION				

REMOTE COMMANDER									
1-466-804-11 REMOTE COMMANDER (RM-832)									
9-903-466-01 POCKET, COVER (FOR RM-832)									

R23	I-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R28	I-216-043-00	METAL GLAZE	560 5% 1/10W		
R24	I-216-091-00	METAL GLAZE	56K 5% 1/10W	R29	I-216-043-00	METAL GLAZE	560 5% 1/10W		
R25	I-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R30	I-216-037-00	METAL GLAZE	330 5% 1/10W		
R26	I-216-089-00	METAL GLAZE	47K 5% 1/10W	R31	I-216-061-00	METAL GLAZE	3.3K 5% 1/10W		
R27	I-216-043-00	METAL GLAZE	560 5% 1/10W	R32	I-216-073-00	METAL GLAZE	10K 5% 1/10W		

R33	I-216-017-00	METAL GLAZE	47 5% 1/10W	R37	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W		
R34	I-216-081-00	METAL GLAZE	22K 5% 1/10W	R38	I-218-773-11	METAL CHIP	750K 0.50% 1/10W		
R35	I-216-081-00	METAL GLAZE	22K 5% 1/10W	R39	I-216-103-00	METAL CHIP	180K 0.50% 1/10W		
R36	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R40	I-216-043-00	METAL GLAZE	560 5% 1/10W		
R37	I-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R41	I-216-033-00	METAL GLAZE	220 5% 1/10W		

R43	I-216-033-00	METAL GLAZE	220 5% 1/10W	R44	I-216-033-00	METAL GLAZE	220 5% 1/10W		
R44	I-216-033-00	METAL GLAZE	220 5% 1/10W	R45	I-216-073-00	METAL GLAZE	10K 5% 1/10W		
R46	I-216-073-00	METAL GLAZE	10K 5% 1/10W						